

Scottish Hospitals Inquiry

Witness Statement of

Matthew Templeton

Introduction and Brief Background

1. I am currently employed by Dalmore Capital Limited (“Dalmore”). Dalmore is an independent fund management company that acquires, manages and holds infrastructure assets to deliver long term value for investors. Dalmore invests in a number of different privately financed infrastructure projects across the UK. One of the projects that Dalmore has invested in is the Royal Hospital for Children and Young People and Department for Clinical Neurosciences, Edinburgh (“RHCYP/DCN” or the “Project”).

2. I joined Dalmore in January 2019. Upon joining Dalmore, I became a director in their Social Infrastructure team where I am responsible for the asset management of a number of Dalmore’s PPP investments. Part of my responsibilities at Dalmore involves taking on directorship roles in the project companies on some of the privately financed projects that Dalmore has invested in. Responsibilities as a director on these assets, in addition to the fiduciary duties, include the following (although this is not an exhaustive list): annual budgeting and business planning oversight and review; monitoring financial performance on an ongoing basis, including review and approval of annual accounts, annual reports and dividend payments; oversight of any material legal disputes; ensuring the continued going concern of the business; and ensuring the appropriateness of the health and safety policies and procedures.

3. I became a director of IHS Lothian Limited (“IHSL”) on 15 January 2019. I am still a director of IHSL. IHSL is the special purpose vehicle (“SPV”) or sometimes referred to as the Project Company (“Project Co”) on the Project. The Project was procured by NHS Lothian (“NHSL”) using the Scottish

Government's non-profit distributing ("NPD") model. The NPD model was developed and introduced by the Scottish Government as an alternative to the traditional private finance initiative ("PFI") or Public Private Partnership ("PPP") model. The NPD procurement model (which has itself now been superseded) replaced the original PFI/PPP procurement model in Scotland.

4. By the time I joined Dalmore at the start of 2019, I had already been involved in the Project for around one year, from the start of 2018 onwards. Prior to joining Dalmore, I was an independent consultant working through my own consultancy business which I started in around 2014. I had been a consultant on the Alder Hey Children's hospital project (and before that I had been a board director for the Alder Hey SPV) and through that project I was introduced to a company called HCP. HCP (which is now known as Vercity) provides SPV management services to many different SPVs on different PFI/PPP projects in the UK, and I provided consultancy services to a few of those projects. HCP provided management services to IHSL on the Project pursuant to a Management Services Agreement (or "MSA"). HCP provided those management services as MSA provider to IHSL up until around 2019 (thereafter, a company called George Street was appointed to provide those management services).
5. I was brought on to the Project by HCP at the start of 2018 and I acted as a consultant engaged by HCP, although reported to and took instruction from the IHSL board of directors throughout 2018. HCP had been involved in the Project providing MSA services to IHSL from Financial Close, through construction and into the early stages of project operations up to November 2019.
6. I hold a BEng (Hons) in Civil and Transportation Engineering and an MBA from Edinburgh University Business School.
7. In my current role at Dalmore, I am also on the board of directors of SPVs on other hospital PFI/PPP projects as well as being a director for IHSL in relation to the RHCYP/DCN.

8. On PFI/PPP projects, the regular on-going operational services and financial management activities are undertaken on behalf of the SPV by the MSA provider. The SPV board itself does not carry out those day-to-day activities itself – the MSA provider does so on the board's behalf.
9. I give this statement in connection with my involvement with IHSL and the RHCYP/DCN.
10. The Inquiry legal team contacted IHSL's legal advisers on 13 November 2023 and invited IHSL to address the following limited issues (quoting from the Inquiry legal team's e-mail):

Settlement and Supplemental Agreement 1 (SA1)

11. *Who drafted the agreed resolutions to the disputes over ventilation for four-bed and single rooms? Were the terms subject to negotiation or revision? Were they drafted under pressure of time?*
12. *Why did the agreed resolutions make provision for air change rates at all: NHSL's summons was concerned with the pressure cascades from multi-bed rooms and made no reference to air change rates?*
13. *The settlement agreement resulted in the certificate of practical completion being issued. It also triggered payment of the service charge. Why was this agreed to? NHSL started paying the monthly service charge when it was not in occupation of the hospital. Was this an issue that arose through the contract structure/financing mechanism?*

Issues After Financial Close which CPs Contend Shed Light on the Evidence to Date

14. *Ken Hall and Graeme Greer corresponded by e-mail on 26 May, 15 June and 22 July 2015 in terms indicating that both parties (through Multiplex*

and Mott MacDonald) were proceeding on the understanding that the EM was only RDD to the extent of NHSL's 7 comments from the meeting of 11 November 2014, which were subsequently included in section 5 of Schedule Part 6 to the Project Agreement.

15. *The design of the ventilation system – including AC, ductwork, air handling units and plant space being necessary to supply the AC number – was reviewed by NHSL and Mott MacDonald, including (i) during the RDD process, where NHSL's requirement for 4 ac/hr in Critical Care bedrooms was confirmed; (ii) during discussions in relation to the pressure regime for the multi bed wards, where in an e-mail of 18 April 2018 NHSL stated that they were “seeking a design for 4AC for all 14 rooms” – which included the multi-bed wards in Critical Care, and (iii) in the Settlement Agreement between NHSL and IHSL dated 22 February 2019.*
16. *After the agreed approach to the number of air changes per hour in Critical Care (HDUs) was questioned by IOM in IOM's first issues log, circulated by Brian Currie on 25 June 2019, NHSL approached IHSL to undertake additional work to achieve 10AC in Critical Care on the basis that this would be a Change in accordance with Schedule Part 16 (Change Protocol) to the Project Agreement.*
17. *Stewart McKechnie of TUV-SUD/Wallace Whittle referred in his evidence to having clarified that the rooms treated with 10AC and 10 pascals of pressure was a correct interpretation.*
18. The Inquiry legal team also invited IHSL's response on certain matters raised in Mott MacDonald's closing submission, namely:
 19. *The alteration to Guidance Note 15 of the Environmental Matrix to make it reference isolation rooms only.*

20. *E-mails from 2016 which MML contends are relevant to understanding the evidence to date.*
21. *The January 2019 correspondence between Brian Currie and Wallace Weir of HCP.*
22. *Further correspondence between Brian Currie and Wallace Weir dated February and March 2019; and*
23. *What steps (if any) were NHSL taking to verify compliance with guidance? Were NHSL placing reliance on IHSL and the Independent Tester to ensure compliance, without any further verification by the health board?*
24. I am unable to address all of the specific issues raised by the Inquiry. I cannot address the following issues: the correspondence between Multiplex and Mott MacDonald in 2016 (referred to in paragraph 14 above) as I was not involved in the Project at the relevant time; Mr McKechnie's interpretation of the guidance or ventilation requirements (referred to in paragraph 17 above); the alteration to Guidance Note 15 of the Environmental Matrix (referred to in paragraph 19 above) or the e-mails from 2016 (referred to in paragraph 20) as I was not involved in the Project at the relevant time.
25. In this statement, I limit my response to the following topics raised by the Inquiry legal team:
 - a) Those issues identified at paragraph 11 to 13 and 15. I have addressed those issues in this statement under the heading 'Settlement and Supplemental Agreement No.1 ("SA1")'. That section focusses on the parties' discussions from early 2018 around the ventilation in single bedrooms and the 4-bed rooms in the RHCYP/DCN and the drafting of the Agreed Resolution contained in SA1 (which was executed in February 2019). I also address my understanding of the 2019 correspondence between Brian Currie and Wallace Weir (referred to in paragraphs 21 and

22 above) under that of this statement although I was not directly involved in that correspondence.

b) NHSL's Change instruction to IHSL to carry out additional work in Critical Care and other areas (referred to in paragraph 16). I have addressed those issues in this statement under the heading 'Supplemental Agreement No.2 ("SA2")' which was entered into between NHSL and IHSL on 5 August 2020. SA2 implemented NHSL's High Value Change 107 ("HVC 107") which was issued by NHSL pursuant to the change provisions of the Project Agreement. NHSL issued HVC 107 following the issue of reports from the Institute of Occupational Medicine ("IOM") in June 2019 and the Scottish Government's decision to delay opening the RCHYP/DCN in July 2019.

26. Throughout this statement, I refer to certain exhibits in the form "MT1", "MT2", etc. Copies of these exhibits, ordered in accordance with that numbering system, are attached to my statement.

27. Insofar as the matters set out within this statement are within my own knowledge, I believe they are true. Insofar as they are not within my own knowledge, they are true to the best of my knowledge and belief.

Settlement and Supplemental Agreement (SA1)

28. I set out my comments in this section 2 of my witness statement on the parties' discussions regarding the Agreed Resolution in SA1.

29. My comments are necessarily focussed upon the specific issues around SA1 which IHSL have been invited to address by the Inquiry's legal team. There is the risk, however, that by limiting my comments to those specific issues that they do not fairly or accurately convey the challenges and the complexities involved in the parties' discussions to conclude SA1 or the complex technical issues that were resolved in SA1.

30. The discussions on SA1 encompassed technical resolutions for various technical issues which had arisen on the Project. However, given the length of time it took to conclude SA1, the “driving” technical issues changed through the passage of time as some issues were resolved through the course of the discussions and others came to light. At the outset of the discussions around March/April 2018, the key technical issues to be addressed were the 4-bed ventilation issue and other alleged issues which formed a list of 81 items in a List of Disputed Items (**A46409292 - Appendix 65 – Technical Schedule – Bundle 13, Volume 2 – Page 1308**). However, Multiplex had undertaken the works to implement the 4-bed ventilation resolution and to resolve many of the other 80 disputed items at its own risk throughout the summer period of 2018. Those items had largely been resolved by September/October 2018; the drafting of the Agreed Resolution to be included in SA1 addressing those issues was agreed; and those ‘original issues’ no longer formed a significant part of the parties’ discussions to conclude SA1 as they had been overtaken by other issues.
31. By September 2018 it was a different list of issues and different key NHSL’s concerns that became the critical issues for settlement namely: drainage, void detection works, heater batteries and a list of 34 additional material items that NHSL had produced in the summer of 2018. A number of Technical Workshops were held throughout the second half of 2018 attended by all the relevant parties to try and reach a resolution of those technical issues on the different list.
32. In addition to the technical resolutions, the discussions around SA1 also involved complex commercial, legal and financing issues. The proposed resolutions also had contractual implications for the existing terms of the Project Agreement, Construction Contract, the Services Agreement (with BYES) and the finance agreements.
33. The discussions on SA1 also involved various different parties. The principal parties engaged in those discussions were NHSL, IHSL and Multiplex. Given the NPD model structure and IHSL’s role as SPV on the Project, IHSL were

appointed as Project Co by NHSL under the Project Agreement and had appointed Multiplex downstream as the design and build contractor under the Construction Contract. IHSL's role was often a facilitative one, seeking to reach resolution on issues which were largely disputed between NHSL and Multiplex. IHSL had to ensure that any agreements it reached with NHSL upstream were similarly agreed by Multiplex downstream. Multiplex were also engaged in its own downstream dialogue with its own supply chain (e.g. its sub-contractors and design sub-consultants). When NHSL and IHSL entered into SA1 pursuant to the Project Agreement, IHSL and Multiplex entered into an equivalent settlement agreement pursuant to the Construction Contract which had been negotiated in tandem with SA1.

34. Other parties were also involved in the discussions around SA1. NHSL's Technical Advisers, Mott MacDonald Limited, were heavily involved in the discussions. IHSL's lenders were also heavily engaged in the discussions. IHSL was the SPV on the Project with lenders providing senior debt to finance the Project. IHSL was unable to enter into any commercial agreements with NHSL upstream or Multiplex downstream without the Lenders' prior consent.
35. The Independent Tester and the Lender's Technical Advisers were also involved at times in the discussions. Because of the significant legal and commercial issues involved the parties' respective legal advisers were involved in the discussions. Scottish Futures Trust were also engaged at certain times, in order to facilitate the parties' discussions at key moments and offering valuable assistance when matters reached an impasse. NHSL also had to submit a business case to the Scottish Government to be able to agree the terms of SA1.
36. The complexity of the discussions is perhaps demonstrated by the length of time that it took for parties to reach a concluded settlement. The parties had agreed in March 2018 to pursue commercial settlement discussions to try and resolve the disputed issues. I issued draft Heads of Terms for a settlement agreement in April 2018 with parties' expectations being that a settlement could be concluded shortly thereafter. In the event, however, the parties' discussions

continued throughout the rest of 2018 and into early 2019. SA1 was executed on 22 February 2019. It took just short of one year for SA1 to be agreed and concluded. The Certificate of Practical Completion (**A35384790 – Commissioning Completion Certificate from Arcadis on Re-provision of RHSC and DCN – 22 February 2019 – Bundle 4 – Page 222**) was issued by the Independent Tester that same day (approximately 18-19 months after the Completion Date envisaged under the Project Agreement).

37. The Inquiry legal team have specifically invited IHSL to address the following specific questions regarding SA1:
- i. Who drafted the agreed resolutions to the disputes over ventilation for four-bed and single rooms?
 - II. Were the terms subject to negotiation or revision?
 - III. Were they drafted under pressure of time?
 - IV. Why did the agreed resolutions make provision for air change rates at all?
 - V. The settlement agreement resulted in the certificate of practical completion being issued. It also triggered payment of the service charge. Why was this agreed to? NHSL started paying the monthly service charge when it was not in occupation of the hospital. Was this an issue that arose through the contract structure/financing mechanism?
38. Notwithstanding the complexities involved in concluding SA1 which I've tried to convey in the paragraphs above, the facts around the ventilation issues and how they came to be resolved in SA1 are capable of being explained very simply.
39. The issues regarding the ventilation in single bedrooms and in 4-bed rooms (sometimes referred to as multi-bed rooms because some of the rooms consisted of 3-bed bays, not 4) had been in dispute for some time between NHSL and Multiplex when in March 2018 NHSL threatened to raise legal proceedings seeking a court order compelling IHSL to design the ventilation system in the 4-bed rooms that NHSL wanted. Following dialogue, the parties agreed to pursue commercial settlement discussions to resolve the issues

rather than pursuing formal dispute proceedings. The dispute regarding the ventilation in the 4-bed rooms concerned the pressure regime in the rooms. NHSL wanted the 4-bed rooms designed with balanced/negative pressure relative to the adjacent corridor whereas Multiplex's understanding of the contract requirements was that rooms required to be designed having positive pressure and had constructed the spaces to this specification. The air change rates in the 4-bed rooms were not in dispute. The Environmental Matrix provided an air change rate of 4 air changes per hour.

40. NHSL had set out in the draft summons (and in the affidavit evidence which accompanied the summons) its clinical case for requiring all the multi-bed rooms to be balanced/negative to the adjacent corridor. NHSL's position was based on its clinical requirements and how it intended to use those rooms for the treatment of patients. NHSL wished to cohort infectious patients in the multi-bed wards and the negative/balanced pressure regime was required, NHSL said, to control the spread of infection.
41. In March 2018, Multiplex proposed three different options for addressing the 4-bed ventilation issue. NHSL agreed (although originally insisting that all 20 No. 4-bed rooms should have negative/balanced pressure, which was Multiplex's proposed Option 3) that the ventilation in 14 No. 4-bed rooms would be balanced/negative pressure at 4 ac/hr (the remaining six numbered 4-bed rooms being unchanged i.e. as-built at the time), which was Multiplex's proposed Option 2. Jim Crombie and Susan Goldsmith agreed they wanted Multiplex's proposed Option 2 at a meeting on 28 March. On 29 March Multiplex confirmed its understanding from the meeting of 28 March that NHSL wanted Option 2. That was when NHSL effectively instructed IHSL and, in turn, Multiplex to implement the 14 no. multi-bed rooms at 4 ac/hr with balanced/negative pressure relative to the adjacent corridor.
42. The first draft of the Technical Schedule containing the Agreed Resolution for the list of 81 items – including the 4-bed ventilation and single bedroom issues - was issued by NHSL's Brian Currie on 22 June 2018 (**A33393733 – NHSL Letter to IHSL 220618_Tech Schedule – 22 June 2018 - Bundle 13, Volume**

9 – Page 5). I don't know who prepared the Technical Schedule for NHSL. Mott MacDonald were NHSL's Technical Adviser on the Project, but NHSL were supported by a team of in-house engineers/NHS Estates professionals. That first draft of the Technical Schedule contained the description of the Agreed Resolution for 14 No. 4-bed rooms (including those in Critical Care) as being balanced/negative pressure at 4 ac/hr.

43. The draft Technical Schedule issued by NHSL in June 2018 (**A33393733 – NHSL Letter to IHSL 220618_Tech Schedule – 22 June 2018 - Bundle 13, Volume 9 – Page 5**) reflected what NHSL and Multiplex had already agreed in terms of the resolutions for the ventilation issues. In fact, Multiplex had already commenced the 4-bed ventilation works (those works commenced in May 2018) by the date NHSL issued the draft Technical Schedule. When the first draft of the Technical Schedule was issued by NHSL, therefore, it simply reflected a resolution which had previously been agreed between NHSL and Multiplex and which was already being reconstructed by Multiplex.
44. The Technical Schedule which listed the 81 disputed items (**A46409292 - Appendix 65 A – Technical Schedule – Bundle 13, Volume 2 – Page 1308**) was subject to revision and discussion between the parties throughout 2018. However, it had largely been agreed and finalised by September 2018, at which point the parties' discussions were focussed upon the technical issues appearing on NHSL's different list of issues.
45. The works in relation to the 4-bed ventilation revising the pressure regime from positive to negative/balanced in the 14 agreed rooms had been completed by Multiplex at their own risk by around September/October 2018. The discussions on SA1 were still heavily underway at that time and still had another 5-6 months to run before being concluded in February 2019.
46. There were undoubtedly times during the parties' discussions on SA1 when they were working under particular pressures and challenges. That pressure arose mainly from September 2018 onwards because parties had targeted Actual Completion for 31 October 2018 (the last date that NHSL would accept

the hospital in 2018 prior to winter pressures) and IHSL and Multiplex were working hard to meet that date.

47. By March 2018 the Project was approximately 8 months beyond the Completion Date defined in the Project Agreement and Completion couldn't be certified until the disputed issues had been resolved. In that sense, therefore, there were clearly pressures on the parties to get matters resolved. NHSL's threat of legal proceedings in March 2018 did escalate matters significantly and led parties to prioritise engagement to resolve the disputes. Although there were those general time pressures given the extent of delay on the Project and the significance of resolving the disputes to achieve Completion, the Agreed Resolutions in the Technical Schedule themselves were not drafted under pressure of time. On the contrary, the Agreed Resolutions had been discussed at length and were properly considered regardless of the background time pressures caused by the Project delay. The Agreed Resolutions for the 4-bed ventilation and single bedroom ventilation were agreed and constructed by September 2018 whilst the discussions on SA1 continued. The ventilation issues were effectively closed off and barely featured in the parties' discussions from September 2018 through to February 2019. If anything, the criticisms to be levelled at the discussions were that they took too long to complete (not that they were rushed).
48. I set out more detailed comments in the following paragraphs.

The Period from January 2018 to March 2018

49. When I started on the Project in early 2018, I quickly became aware that there were significant issues of difference between NHSL and Multiplex. One of those disputed issues related to the ventilation in the 4-bed rooms of the RHCYP/DCN.
50. One of the early tasks I undertook on the Project, in March 2018, was to review the relevant correspondence and positions advanced by NHSL and Multiplex on the 4-bed ventilation issue and to give the IHSL board of directors my views.

The IHSL directors involved on the Project at that time included Andy Clapp of Dalmore, Richard Osborne of Macquarie and Tony Rose of Scottish Futures Trust. Tony was the Public Interest Director (“PID”) for IHSL at that time. I would refer the Inquiry to IHSL’s paper prepared for the Inquiry dated 22 July 2021 **(A45180065 – Appendix to IHSL Response to PPP7 – Bundle 13, Volume 9 – Page 6)** which set out the structure of the parties and who was involved in the project (and when) in detail. The PID was a particular feature of the NPD model of procurement. A PID was appointed by the procuring authority, but nominated by the Scottish Futures Trust, to the board of the SPV in public projects procured using the NPD model. The PID at that time was a Scottish Futures Trust employee. The appointment of a PID was intended to represent the public’s interest in the governance of the NPD structure which, in turn, was intended to increase transparency and accountability and to promote a more proactive and stable partnership between the public and private sectors on PFI/PPP-type infrastructure projects.

51. When I carried out that review of the 4-bed ventilation issue in early March 2018, I learned that the 4-bed ventilation issue had been on-going and discussed by the parties since 2016. The dispute concerned the pressure regime in the 4-bed rooms. NHSL wanted the pressure regime in all 4-bed rooms to be balanced/negative relative to the adjacent corridor. Multiplex understood the requirements for the pressure regime in the 4-bed rooms to be positive and had designed and built the ventilation accordingly. It was a long-standing issue and was clearly one that had been subject to detailed discussions between NHSL, IHSL and Multiplex. Both NHSL and Multiplex had obtained independent expert reports on the issue in late 2017. NHSL had obtained an expert report from a specialist mechanical and electrical engineer called David Rollason **(A33394885 – 3 November 2017 – David Rollason Report Final – Ventilation - Bundle 13, Volume 9 – Page 30)**. Multiplex had obtained an expert report from DSSR Consulting Engineers **(A36322651 – 4.2.24 G3062-DSSR-X-XX-RP-MEP-57001-Rev P3 - Bundle 13, Volume 9 – Page 73)**. Both NHSL and Multiplex had also obtained legal Opinions from leading QCs which supported their respective positions.

52. The issues around the 4-bed ventilation dispute were complex and I do not intend to address the parties' respective positions in this witness statement. The dispute involved (amongst other things): detailed analysis of the provisions of the Project Agreement between NHSL and IHSL; the room environmental requirements specified in the Environmental Matrix and its progress through the Reviewable Design Data procedure; whether a 4-bed room properly constituted a single bedroom or a ward (the guidance in Scottish Health Technical Memorandum SHTM 03-01 did not specifically recognise a 4-bed room as a defined area but referred to a general ward); the status and development of the Environmental Matrix; what relevance, if any, generic ADB sheets had to the Project; and ultimately whether what NHSL was asking for in terms of 4-bed ventilation constituted a change to the room requirements set out in the Project Agreement at Financial Close (entitling IHSL and, in turn, Multiplex to time and cost) or whether the Project Agreement already required it.
53. The 4-bed ventilation issue was not the only (or indeed the first) ventilation issue to have arisen on the Project. An earlier difference had arisen between NHSL and Multiplex in relation to the ventilation in the single bedrooms. This concerned the increase of dirty extract through the en suites and a mixed mode solution to achieve 6 ac/hr (mechanical ventilation at 4ac/hr supplemented by natural ventilation). The issues in the single bedrooms had been largely resolved by early 2018 although there were on-going discussions around the specific terms of the relevant change notices and derogation from guidance.
54. The main dispute between the parties by early 2018 concerned the ventilation in the 4-bed rooms. NHSL appeared to want the 4-bed rooms to be treated in the same way as single bedrooms. I am now aware through the work of the Inquiry of the e-mail correspondence between Brian Currie (NHSL) and Ian Storrar (HFS) in June 2016 (referred to by the Inquiry in its Provisional Position Paper 8 situated on the Inquiry website) when NHSL asked for advice on how HFS would interpret the application of the guidance to a 4-bed room and HFS advised that it would not be unreasonable to treat a multi-bed room as one would a single bedroom. I was not aware of that correspondence until this

Inquiry. That correspondence may explain why NHSL applied the requirements for single bedrooms to 4-bed rooms. Multiplex on the other hand considered that the requirements for a general ward applied to the multi-bed rooms.

55. By the time of my involvement in the Project in early 2018 the issue relating to the 4-bed ventilation had been on-going for over 18 months. Multiplex and its design sub-consultants, TUV Sud/Wallace Whittle, had made a number of technical proposals to NHSL throughout 2017 to the ventilation systems in the 4-bed rooms (sometimes referred to as the “multi-bed rooms”) to achieve room balance. These proposals had been discussed at meetings between NHSL, Multiplex and TUV Sud/Wallace Whittle throughout 2017. IHSL and Multiplex had also made without prejudice proposals to try and resolve the issue. The crux of the dispute was whether that requirement for the pressure regime to be negative or balanced relative to the adjacent corridor was a Change under the Project Agreement (and, in turn, under the Construction Contract between IHSL and Multiplex). If it was a Change, it would have entitled IHSL and, in turn, Multiplex to time and cost relief for that Change. A change to the pressure regime in the (already constructed) ventilation system to the 4-bed rooms in the hospital would have involved a significant amount of design and construction work and considerable additional cost. Such significant works could not have been commenced by Multiplex until there was clarity around who was responsible for the issue. The matter of which party bore the time and cost consequences of the ventilation issue was therefore critically important.
56. The dispute regarding the ventilation in the 4-bed rooms related to the pressure regime in those rooms. The Environmental Matrix had provided for positive pressure relative to the en suite but was silent in relation to the pressure regime relative to the adjacent corridor. Multiplex had designed the ventilation system based on its understanding of the contract requirements so that the pressure regime in the 4-bed rooms was positive to the adjacent corridor. NHSL wanted the rooms designed so that the pressure regime was balanced or negative to the adjacent corridor. There was no dispute at that time that I was aware of around the relevant air change rates in the 4-bed rooms. The Environmental Matrix specified an air change rate of 4 ac/hr in the 4-bed rooms. The parties’

independent experts had addressed the 4-bed ventilation dispute as being one concerning the pressure regime (David Rollason's report specifically identified that he had not been instructed by NHSL to consider air change rates)

(A33394885 – 3 November 2017 – David Rollason Report Final – Ventilation - Bundle 13, Volume 9 – Page 30). Similarly, the parties' QCs' Opinions also addressed the dispute as being one concerning pressure regimes i.e. whether the pressure regime in the 4-bed rooms should be positive to the adjacent corridor or negative/balanced relative to the adjacent corridor.

57. Notwithstanding all the dialogue that had been undertaken between the parties throughout 2017 on their contractual positions, the procurement of independent expert reports, QCs' Opinions and the views offered by the Independent Tester, the issue of the ventilation pressure regime in the 4-bed rooms remained in dispute. NHSL's position for requiring the pressure regime to be balanced/negative to the adjacent corridor was ultimately based on its clinical case and its clinical requirements for the spaces.
58. NHSL, IHSL and Multiplex attended a facilitated workshop in February 2018 (which has also been referred at times to the 'mediation' or the 'Sheraton meeting') to discuss the 4-bed ventilation issue and the other disputed issues which remained unresolved at the time. The workshop resulted in draft proposals being issued by the facilitators (Richard Osborne and Tony Rose) to the parties to help resolve the disputed issues. Those proposals were issued to the parties for further discussion. Whilst I received a copy of the proposals, I was not in attendance at this meeting.
59. The dispute regarding the ventilation in the 4-bed rooms really came to a head in mid-March 2018. NHSL wrote to IHSL by letter dated 13 March 2018 stating that IHSL (in reality, Multiplex) had not confirmed that it intended to revise the ventilation system to the 4-bed rooms **(A47272786 – Letter from NHSL to IHSL dated – 13 March 2018 – Bundle 13, Volume 9 – Page 92)**. NHSL restated its position that the Project Agreement, Good Industry Practice (which was a defined term under the Project Agreement), and the Board's Construction Requirements all required the pressure regime in the 4-bed rooms to be

negative/balanced to the adjacent corridor. NHSL stated in that letter that if they did not hear from IHSL by Monday 19 March 2018 confirming its position NHSL would raise Court proceedings against IHSL seeking an interim order requiring IHSL to design the ventilation in all of the 20 relevant 4-bed rooms (including those in Critical Care) such that the design achieved a balanced/negative pressure regime relative to the adjacent corridor.

60. On 21 March 2018, Jim Crombie (Deputy Chief Executive of NHSL) wrote to IHSL stating that the ventilation in the multi-bed rooms was of critical importance to NHSL and required IHSL to confirm it would undertake what NHSL considered was the requisite ventilation works (**A47272785 – Letter from NHSL to IHSL dated 21 March 2018 - Bundle 13, Volume 9 – Page 96**). Mr Crombie explained that to put any questions around NHSL's justification for its position beyond doubt, NHSL had shared a copy of the draft Court summons and supporting affidavit evidence which NHSL had prepared in contemplation of the court proceedings. NHSL advised that the clinical case for their position on the pressure regime in the 4-bedded rooms was set out in the draft summons and the affidavits which had been provided by Graeme Greer of Mott MacDonald and Janice Mackenzie of NHSL, the Project Clinical Director for the Project. NHSL's letter confirmed that NHSL had instructed its solicitors to delay lodging the summons with the Court together with the application for an interim order until 10am the following day, Thursday 22 March 2018.
61. The draft Court summons, amongst other things, sought an interim court order ordaining IHSL to submit a design which provided a ventilation system for the multi-bed rooms (which were specified in the first schedule annexed to the summons) that achieved a balanced or negative pressure relative to the adjacent corridor. The first schedule consisted of a Schedule of Rooms which included three multi-bed rooms in Critical Care (1-B1-063, 1-B1-031 and 1-B1-009). The summons explained that there were twenty multi-bed rooms in the RHCYP/DCN, nineteen of which were listed in the Schedule of Rooms. The twentieth room, 1-B1-065 (which was also located in Critical Care), had already been designed with pressure that was balanced or negative relative to the

corridor through a previous NHSL instruction. The dispute concerned the other nineteen rooms.

62. The summons did not identify any issues relating to air change rates in the 4-bed rooms. The dispute described in the draft summons only concerned the pressure regime in the multi-bed rooms.
63. In the draft Court summons, NHSL explained its approach to infection control and explained that there were circumstances in which patients with an infection may be treated in multi-bed rooms. NHSL also explained that there was a national shortage of duly qualified staff and even if NHSL could recruit sufficient staff that would have budgetary implications. The summons stated that a balanced or negative pressure was necessary to inhibit the spread of infection from a room to adjacent areas and if that environment was not provided there was an unacceptable risk of infection spreading to other parts of the hospital. The summons also stated that other similar children's hospitals all had balanced or negative pressure relative to the adjoining space in their multi-bed rooms and this was what the industry would normally expect to inhibit the spread of infection from patients in multi-bed rooms. NHSL explained that having all multi-bed rooms balanced or negative pressure relative to the adjoining space was consistent current best practice and also Good Industry Practice. NHSL's position centred round its clinical requirements and the clinical use to which the multi-bed rooms would be put.
64. The summons did not identify that the guidance contained in Table A1 of SHTM 03-01 stated that areas in Critical Care were recommended to have positive pressure relative to the adjacent corridor. NHSL insisted upon a negative or balanced pressure regime in all the multi-bed rooms, including those in Critical Care. This would become significant later on in June 2021 when IOM required the multi-bed rooms in Critical Care to be +10Pa positive pressure.
65. The prospect of court litigation on the 4-bed room ventilation represented a significant escalation of events. IHSL and Multiplex were in discussions regarding the defence of the threatened court action. Given the provisions of

the Project Agreement and the Construction Contract Multiplex would have defended the court actions in IHSL's stead. NHSL's solicitors wrote to Multiplex's solicitors with the draft summons and affidavits which NHSL had anticipated instructing its solicitors to lodge on Thursday 22 March 2018.

66. On 22 March 2018, however, I issued an e-mail to Jim Crombie and Susan Goldsmith at NHSL attaching a letter from IHSL which, in turn, enclosed a letter from Multiplex and a proposal from Multiplex on which IHSL invited urgent engagement **(A47272784 – E-mail dated 22 March 2018 with the Multiplex proposal - Bundle 13, Volume 9 – Page 100) (A47272788 – Letter from IHSL to NHSL dated 22 March 2018 – Bundle 13, Volume 9 – Page 101) (A47272787 – Letter from MPX to IHSL dated 22 March 2018 – Bundle 13, Volume 9 – Page 104)**. The proposal from Multiplex adopted concepts to describe the disputed issues that had been previously used and discussed by the parties in the February workshop. The Multiplex proposal identified the significant matters as follows:

- i. The “Without Prejudice Works” which consisted of items alleged by NHSL to be non-compliances which Multiplex agreed to address on a without prejudice basis.
- ii. The “NHS Works” which was a list of issues that NHSL intended to carry out and complete post-completion of the works under the Project Agreement and, in turn, the Construction Contract. These issues included ATD Installations; fire strategy amendments; car park barriers; and MRI quench pipes; and
- iii. The “Ventilation Works” which consisted of the 4-bed room ventilation changes.

67. The Multiplex proposal of 22 March 2018 set out a proposal which: sought to allow the hospital to open by limiting further delay; which allowed all work to be undertaken as part of a coordinated and managed process; and which avoided protracted and expensive litigation. The proposal also set out a suggested timetable for parties to be able to implement that proposed approach. That timetable provided, amongst other things, that by 3 April 2018 NHSL was to

confirm to Multiplex its requirements for the ventilation of the 4-bed rooms in accordance with one of the 3 options listed in the attachment to the proposal. The attachment entitled “Without Prejudice Ventilation Options” identified three options for the 4-bed room ventilation issue.

68. “Option 1” was described as being a proposal which had been previously discussed at length with NHSL and its advisers to achieve a negative or balanced pressure in 14 rooms. I was not aware of what that Option involved or what had been previously discussed between NHSL and Multiplex. “Option 2” was described as negative or balanced pressure in 14 rooms at 4 air changes per hour. “Option 3” was described as negative or balanced pressure in 20 rooms at 4 air changes per hour.
69. The mediation tracker document entitled “RHSC Mediation – Current Clinical Risk Items – 20th March 2018” which was issued by Multiplex along with its letter of 22 March identified (at point 7) that, regarding the 4-bed ventilation issue, NHSL had changed its position on what was acceptable and reverted to all 20 rooms at 4 ac/hr. NHSL and Multiplex had evidently had discussions around whether NHSL wanted negative/balanced pressure in 14 rooms at 4 air changes per hour (which constituted Option 2 in Multiplex’s proposal) or negative/balanced pressure in all 20 rooms at 4 air changes per hour (which constituted Option 3 in Multiplex’s proposal).
70. The proposal which was issued on 22 March 2018 averted the threat of the legal proceedings and formed the basis of the parties’ further discussions. A meeting was held on 28 March between representatives of NHSL and IHSL. Jim Crombie, Susan Goldsmith and Iain Graham attended that meeting for NHSL; Tony Rose, Andy Clapp and I attended on behalf of IHSL. The purpose of the meeting was to ensure that NHSL had properly understood the Multiplex proposal and whether there were any clarifications that IHSL could address. Jim Crombie advised us at that meeting that NHSL had taken the court action off the table for the time being.

71. Andy Clapp's e-mail summarising that meeting (**A47272789 – Email from Andy Clapp dated 29 March 2018 - Bundle 13, Volume 9 – Page 110**) stated that Jim Crombie had advised that NHSL were very keen on fixing an occupation date for first patients and that the last realistic date this could happen in 2018 was 31 October i.e. prior to winter pressures. Jim Crombie explained that if this date was missed, the move would be postponed to late February 2019 (post winter pressures).
72. With regards to the 4-bed ventilation issue, Andy's e-mail identified that Multiplex's three ventilation options had been discussed at that meeting. NHSL had advised that Option 1 was not acceptable and would not be considered. NHSL had concerns around the construction costs for Ventilation Options 2 and 3 but later in the discussion NHSL agreed to progress on the basis of Option 2 at the meeting of 28 March (as summarised in Andy Clapp's email) i.e. negative/balanced pressure in 14 rooms at 4 ac/hr. Andy's email also explains that NHSL requested that Ventilation Option 2 be worked up in more detail so that NHSL fully understood that it delivered the clinical requirements and also the commercial aspects that they required. In terms of the next steps, Andy's e-mail states that NHSL advised that they would brief Multiplex, develop the commercials around Ventilation Option 2 within a joint programme and reconvene on a call to include Multiplex which was indicated might take place later that day.
73. In advance of that planned call on 29 March 2018, Brian Currie issued an e-mail to Darren Pike (who was Multiplex's Project Director) dated 29 March 2018 attaching NHSL's thoughts on a collaborative framework moving forward (**A47272790 – Email from NHSL to MPX DATED 29 March 2018 - Bundle 13, Volume 9 – Page 113**) (**A47272792 – Collaborative Framework – Bundle 13, Volume 9 – Page 115**). Brian's e-mail notes that the attachment had been approved by Principals within NHSL's Board and suggested that it be shared within Multiplex. That "Collaborative Framework" includes (Item 1) jointly developing and agreeing a final programme to Actual Completion incorporating all Multiplex and NHSL activities as appropriate and practical to satisfy compliance with their contractual obligations and eventual sign off by the

Independent Tester. These works were to incorporate agreed balanced/negative ventilation specification works to the multi-bed rooms, the scope being 14 rooms at 4 ac/hr. That is the Ventilation Option 2 works set out in the Multiplex proposal.

74. After that call on 29 March 2018, Darren Pike sent an e-mail (**A47272793 – Email from MPX dated 29 March 2018 - Bundle 13, Volume 9 – Page 116**) to the NHSL team, the IHSL team (including myself) and the Multiplex team stating that it had been an action on Darren’s part on the earlier call to circulate and confirm certain points. Darren sets out in that e-mail that it was Multiplex’s understanding that 14 numbered 4-bed rooms were to have 4 air changes per hour at negative/balanced pressure and that this would satisfy NHSL’s requirements for these spaces with regards to ventilation. Darren comments that the timeline on this was crucial and Multiplex’s designers would need to start work on Tuesday 3 April in order to keep to the proposed programme. Darren stated that Multiplex wanted confirmation and instruction to commence design on this basis as soon as possible.

The Draft Heads of Terms – April 2018

75. IHSL’s discussions on the commercial aspects of the Multiplex proposal continued with Multiplex and NHSL through to the end of March and into early April 2018.
76. The Inquiry has invited IHSL to comment specifically on an e-mail from NHSL to Multiplex dated 18 April 2018. The Inquiry has provided IHSL with a copy of the relevant document which I have now been shown. I see it is a copy of a communication sent from Ronnie Henderson of NHSL to Ken Hall of Multiplex sent through Aconex, which was the document management platform used on the Project. The communication is also sent to individuals from Mott MacDonald and Wallace Whittle. The communication was not sent to me or to any others at IHSL, so I had no personal involvement. The communication is from Ronnie Henderson and states that NSHL is seeking design for 4 air changes to all 14 rooms and asks for confirmation from Multiplex that this is the brief that has

been given to Wallace Whittle. This appears to be consistent with the discussions addressed above between NHSL, IHSL and Multiplex in that time period during which NHSL had confirmed that it wanted the ventilation to be designed having 4 ac/hr with negative/balanced pressure in 14 of the 4-bed rooms (not all 20) – that is, Multiplex’s Option 2.

77. In April 2018, I prepared the first draft of Heads of Terms (sometimes referred to in the correspondence as (“HoTs”) which I issued to Andy Clapp by e-mail dated 19 April 2018 **(A47272791 – Email dated 19 April 2018 - Bundle 13, Volume 9 – Page 119) (A47272794 – Heads of Terms – Bundle 13, Volume 9 – Page 120)**. The HoTs needed further development in terms of content, structure and the technical costs and schedules. There were clearly lots of gaps as the deal structure was not fully developed and so it was my intention that IHSL would share an early draft of the HoTs with Multiplex and NHSL and parties would jointly populate the document so that they had agreed HoTs within 2 weeks.
78. The draft HoTs anticipated that there would be a tripartite settlement agreement between NHSL, IHSL and Multiplex. That was the original intention (but ultimately NHSL and IHSL entered into SA1 pursuant to the Project Agreement and IHSL entered into an equivalent but separate downstream settlement agreement with Multiplex pursuant to the Construction Contract). The first draft of the HoTs state at paragraph 3.1.2 that NHSL had agreed that fourteen of the 4-bed areas required ventilation works to provide a balanced/negative pressure regime to the corridor and each 4-bed area will be provided with 4 air changes per hour.
79. I issued the draft HoTs to the NHSL team and the Multiplex team by e-mail dated 20 April 2018 **(A47272795 – Email dated 20 April 2018 - Bundle 13, Volume 9 – Page 128) (A47272799 – Email dated 20 April 2018 Attachment 1 – Bundle 13, Volume 9 – Page 129) (A47272800 – Email dated 20 April 2018 Attachment 2 – Bundle 13, Volume 9 – Page 138)**. I explained in my e-mail that following the technical and commercial meeting which had taken place on 12 April 2018, IHSL had drafted HoTs for an anticipated tripartite Settlement

Agreement and that the draft HoTs set out IHSL's view of the proposal, but it was being issued to NHSL and Multiplex for their thoughts.

80. In addition to the draft HoTs, IHSL and NHSL commenced discussions around the financial elements of a commercial settlement.

81. On 26 April 2018, I sent an e-mail to Susan Goldsmith and the wider NHSL team concerning the suggestion of a face-to-face meeting of principals from NHSL, IHSL and Multiplex. My e-mail mentions that Multiplex would be issuing a draft programme detailing a planned completion by 31 October 2018. I mentioned that the development of this programme had highlighted that to achieve completion by that date of 31 October 2019, with respect to the 4-bed ventilation works Multiplex would be required to instruct their M&E sub-contractor (Mercury) on 7 May 2018. I advised that IHSL wished to discuss the form of instruction which could be provided to maintain the programme but recognising that such an instruction might come in advance of concluded HoTs or any formal agreement.

82. On 30 April 2018, I issued an updated draft HoTs to the NHSL team and the Multiplex team **(A47272797 – Without Prejudice email dated 30 April 2018 - Bundle 13, Volume 9 – Page 147) (A47272798 – Settlement Agreement HoTs Attachment – Bundle 13, Volume 9 – Page 149)**. That draft incorporated the comments I had previously received from both NHSL and Multiplex. Paragraph 2.1.2 of that draft addressed the 4-bed ventilation works and identified that NHSL had agreed that fourteen of the 4-bed areas require ventilation works to provide a balanced/negative pressure regime to the corridor, where each 4-bed area will be provided with 4 air changes per hour.

83. The discussions on the draft HoTs continued into early May 2018. I had received comments from Michael Pryor at NHSL on the draft HoTs by e-mail dated 4 May 2018 and had discussions with him which allowed the draft HoTs to be developed further. In the draft HoTs issued by Michael on 4 May, NHSL had deleted the reference to the agreed ventilation solution set out in paragraph 2.1.2 and instead indicated that NHSL wanted it defined in a separate schedule. The updated draft HoTs which I had prepared as at 9 May

2018 still stated at paragraph 2.1.2 that NHSL had agreed that fourteen of the 4-bed areas required ventilation works to provide a balanced/negative pressure regime to the corridor with each 4-bed rooms being provided with 4 air changes per hour.

84. The discussions regarding the finalisation of the HoTs for a settlement agreement were still on-going in early May when IHSL first instructed its solicitors to commence drafting the settlement agreement itself. IHSL had hoped at that stage that a settlement agreement might be capable of being concluded within approximately 4 weeks.
85. The draft HoTs were ultimately never concluded because they had been overtaken by the discussions on the draft settlement agreement.

The First Draft of the Settlement Agreement

86. On 21 May 2018 I issued the first draft of the proposed settlement agreement between NHSL and IHSL to Jim Crombie and Susan Goldsmith and the wider NHSL team and to Callum Tuckett and Ben Keenan at Multiplex (**A47272801 – Email dated 21 May 2018 - Bundle 13, Volume 9 – Page 157**) (**A47272802 – Attachment to email dated 21 May 2018 – Bundle 13, Volume 9 – Page 158**). The first draft had been prepared by Pinsent Masons on behalf of IHSL. It was intended that a very similar back-to-back agreement would be developed between IHSL and Multiplex.
87. The first draft of the settlement agreement was a preliminary draft which was subject to review by Multiplex, the Lenders and NHSL.
88. On 25 May 2018, Brian Currie sent me an e-mail, copying Darren Pike at Multiplex and Graeme Greer at Mott MacDonald, attaching NHSL's half of the technical schedule for the settlement agreement which was described by Brian as "wip" which I understood to mean "work in progress" (**A47272805 – Email dated 25 May 2018 - Bundle 13, Volume 9 – Page 177**) (**A47272804 - Settlement Agreement Schedule dated 25 May 2018 – Bundle 13, Volume 9 – Page 179**). Brian's e-mail explained that the "RAG tracker" (that is the

red/amber/green tracker) showed the current status of the information available as NHSL saw it. It also explained that a combined Multiplex and NHSL version of the technical schedule would be developed and issued to me the following week.

89. Item 7 of the draft technical schedule issued by Brian addressed the 4-bed ventilation issue. It stated in the “Description” column that NHSL believed that IHSL’s design for ventilation was not compliant with the Board’s Construction Requirements, Project Co’s Proposals, SHTM Guidance and Reviewable Design Data comments at Financial Close. It also stated that the Board believed the intake air change rate and the extract air change rates were not compliant. The Description column continued by stating that, from a clinical perspective, the principal concern to NHSL in continuing with IHSL’s proposed pressure regime design meant there was an unacceptable risk of the spread of bacterial airborne infection into corridors and surrounding patient rooms. NHSL therefore required the pressure regime to be balanced or negative to the corridor.
90. The first draft technical schedule issued by Brian Currie contained a list of 81 different items that were disputed between the parties. The 4-bed room ventilation issue was one of those items (**A46409292 - Appendix 65 A – Technical Schedule – Bundle 13, Volume 2 – Page 1308**).
91. By June 2018, the parties’ discussions on the “front-end” of the Settlement Agreement began to run in parallel with the discussions around the draft technical schedule which would form part of the back end of the Settlement Agreement.

The First Issue of the Technical Schedule and Agreed Resolution Issued by NHSL on 22 June 2018

92. On 12 June 2018, I received an e-mail from Susan Goldsmith at NHSL in which Susan stated that NHSL had the opportunity to reflect on progress towards finalisation of the Settlement Agreement and on the content of the revised draft which I’d circulated on 8 June (**A47272803 – Email from NHSL dated 12 June**

2018 - Bundle 13, Volume 9 – Page 184). Susan stated that it had become clear to NHSL that there was a disconnect between progress of the development of the commercial aspects of the settlement and the technical aspects. Susan reiterated NHSL's commitment to the resolution of the outstanding issues through a settlement agreement rather than through formal dispute proceedings and so had set out what NHSL considered to be their position on the Settlement Agreement and technical schedules.

93. Susan stated in her e-mail of 12 June that NHSL was required to objectively justify the funds to be injected into the Project and was required to present a business case to the Scottish Government that supported the proposed solution. The business case would seek to demonstrate that reaching a commercial settlement offered superior value for money that the potential risk adjusted cost to NHSL of court proceedings or contractual dispute resolution. Susan invited more details from IHSL on the financial aspects of the proposed settlement in order for NHSL to complete that business case.
94. With regards to the full and final settlement nature of the proposed settlement agreement, Susan advised in that e-mail that following discussions with NHSL's technical team there would be a move away from the current drafting in relation to the "Disputed Items", "Dispute", "Released Claims" and a move towards drafting which was more reflective of the Project Agreement structure. Susan explained that the current 81 issues were more akin to "Works in Progress" rather than "Disputed Items" given that a solution for each of the issues was now broadly agreed and it was recognised that both parties had further actions to implement to ultimately resolve the issues in line with the agreed solution.
95. As I've stated earlier, Multiplex had commenced the Ventilation Option 2 works at their own risk in May 2018 in order to retain the proposed programme of completion by 31 October 2018 (notwithstanding that HoTs or the settlement terms had not been agreed). Multiplex did so on the expectation that settlement terms would be agreed soon after they commenced those works to the ventilation in the 4-bed rooms.

96. On 22 June 2018, Brian Currie (NHSL's Project Director) wrote to IHSL enclosing the first draft of the "Technical Schedule". Brian explained in his letter that this Technical Schedule set out what the "Agreed Resolution" was for each Disputed Item as well as describing the technical solution for each Disputed Item. Brian issued the letter and the Technical Schedule by e-mail dated 22 June 2018 **(A47272807 – Email from NHSL to IHSL dated 22 June 2018 - Bundle 13, Volume 9 – Page 187) (A47272806 - Letter from NHSL dated 22 June 2018 – Bundle 13, Volume 9 – Page 189) (A47272808 – Technical Schedule – Bundle 13, Volume 9 – Page 190)** to Wallace Weir but copied to Andy Clapp, Richard Osborne, Tony Rose and me along with the wider NHSL team (Jim Crombie, Susan Goldsmith, Iain Graham and Michael Pryor). The Technical Schedule listed the 81 Disputed Items. It contained columns entitled "Dispute", "Description of Agreed Resolution", "Project Co Obligations", "Board Obligations" and "Changes to Project Agreement".
97. Item 7 of that draft Technical Schedule addressed the issue of the 4-bed room ventilation. The description of the "Dispute" was a similar description to that contained in the draft technical schedule that Brian had issued on the 25 May 2018 (referred to in paragraph 2.61 above). The "Description of the Agreed Resolution" column stated that the design data noted in the description had been given status B through the Review Procedure and described the Agreed Solution as follows:

"The solution submitted through the Review Procedure is for 14 No. 4 bed rooms will be balanced or negative to the corridor at 4 ac/hr."

98. The column headed "Project Co Obligations" stated as follows:

"Design, construct, test, commission and complete in accordance with the Agreed Resolution to meet the Completion Criteria and other terms of the Project Agreement as revised pursuant to this Agreement."

99. The column entitled "Board Obligations" stated:

“Subject to Project Co complying with Project Co Obligations, this is an Approved RDD Item.”

100. It was not surprising that the air change rate was specified alongside the pressure regime in the Agreed Resolution in the Technical Schedule. The prior discussions around the 4-bed Room ventilation and written communications describing the solution had always quoted both together, as if they were intrinsically linked. Recognising the dispute around contract interpretation, I assumed both were included for completeness and to remove any ambiguity.

101. Item 13 of the draft Technical Schedule addressed the issue of the single bedroom ventilation air changes. The description of the “Dispute” was:

“Air change rates proposed by Project Co for single bedrooms are not in compliance with SHTM 03-01 and Board’s comments. 4 ac/hr supply provided to the bedrooms instead of the required 6 ac/hr. The ensuite extract rate proposed in excess of 10 ac/hr where requirements of SHTM 03-01 is 3 ac/hr.”

102. The “Description of the Agreed Resolution” column stated:

“This agreed technical solution has been documented in the following Project Co Change which is now deemed an Approved RDD Item subject to and in accordance with the terms of this Agreement.”

Detail of Change

103. *Project Co are proposing to deviate from SHTM 03-01... Table A1.. column 3, ac/hr by:*

- i. Decreasing the mechanical air change ventilation rates within single bedrooms from 6 air changes per hour (6 ac/hr) to 4 air changes per hour (4 ac/hr); and*

- ii. *increase the mechanical air change ventilation rate within single bedroom WCs from 3 air changes per hour (3 ac/hr) to 10 air changes per hour (10 ac/hr).*

Reasons

“The design philosophy for ventilation within single bedrooms (and ensembles) is for a mixed mode operation where natural ventilation is encouraged, which is believed to provide both physiological and environmental benefit by allowing users partial control of their environment and reducing the loading on the mechanical ventilation system respectively. The strategy results in zero pressure differential regime within the room where supply and extract is balanced.

Additionally, the mechanical extract ventilation air change rate has been increased within the single bedrooms ensuite from 3 air changes per hour (3 ac/hr) to 10 air changes per hour (10 ac/hr) (minimum) to provide a fresh environment for patients. This ensuite extract provides a balanced air change rate to the bedroom.

The design intent and figures noted above are reflected within the environmental matrix previously submitted through RDD.”

104. I do not know who drafted the Technical Schedule or the Agreed Resolution for NHSL which Brian Currie circulated on 22 June 2018. The draft Technical Schedule was issued following Susan Goldsmith’s revised approach set out in her e-mail of 12 June 2018 (**A47272803 – Email from NHSL dated 12 June 2018 - Bundle 13, Volume 9 – Page 184**). which Susan had explained had been discussed with NHSL’s “technical team”. NHSL’s Technical Adviser was Mott MacDonald but NHSL was supported by a group of in-house engineers/NHS Estates professionals. NHSL also had access to the clinical teams.

105. It was clearly very helpful for all parties to have the Agreed Resolution to the 4-bed room ventilation issue and single bedroom ventilation set out in such clear terms in the Technical Schedule, both in terms of the pressure regime and air change rates, to ensure there was no ambiguity. By that stage in June 2018, however, there was no real controversy around the agreed resolution of the 4-bed ventilation issue or single bedroom ventilation. With regards to the 4-bed ventilation, the parties had discussed the Ventilation Options set out in Multiplex's proposal issued on 22 March and NHSL had confirmed that it wanted Multiplex to proceed with Ventilation Option 2 i.e. 14 rooms having negative/balanced pressure with 4 ac/hr. Multiplex had already commenced those ventilation works and so by 22 June 2018 when the Technical Schedule was issued it was doing little more than reflecting the ventilation works that had already been agreed and the reality that the resolution was already being implemented by Multiplex.

106. It is important to highlight here that Multiplex had already built the ventilation system in the multi-bed rooms (including in Critical Care) with a positive pressure regime before commencing the Agreed Resolution at risk. Multiplex were effectively undoing what it had already built in order to change the pressure regime to balanced/negative in the 14 no. rooms.

107. Following receipt of the Technical Schedule from Brian on 22 June 2018, I issued it to Multiplex that same day. I requested Multiplex to review the Technical Schedule and to provide comments as soon as possible. Brian had also issued a Microsoft Word version of the Technical Schedule to allow Multiplex to mark-up their comments.

Parties' Discussions on the Technical Schedule

108. In an e-mail dated 27 June 2018, Multiplex issued a version of the Technical Schedule reviewed and edited to "MPX view" (a Multiplex version of the schedule). In that e-mail Darren Pike advised that Multiplex saw no need for the final 3 columns in the Technical Schedule issued by Brian on 22 June and so

these had been deleted. These were the columns entitled “Project Co Obligations”, “Board Obligations” and “Changes to Project Agreement”. I asked Multiplex to mark up the draft Technical Schedule which was issued by Brian Currie on 22 June (which was why we’d asked for a Word version of it).

109. The draft Technical Schedule in the format issued by Brian on 22 June was revised by Multiplex in July 2018 and issued by their solicitors (Brodies) to IHSL’s solicitors (Pinsent Masons) by e-mail dated 18 July 2018. That mark-up of the Technical Schedule deleted the final 3 columns in NHSL’s original version so that it consisted only of the “Dispute” column and the “Description of the Agreed Resolution” column.
110. Multiplex made an amendment to the “Description of Agreed Resolution” column by adding to the description an additional sentence referencing the remaining 6 No. 4 bed rooms which were not subject to the Agreed Resolution **(A47272813 – Technical Schedule dated 5 July 2018 - Bundle 13, Volume 9 – Page 211)**. Multiplex’s amendment clarified that those other 6 No. 4 bed rooms remained as per the Environmental Matrix and as built. Multiplex also made a minor adjustment to NHSL’s original text describing the Agreed Resolution so that it stated:

“The resolution submitted by Project Co through the Review Procedure is for 14 No. 4 bed rooms to be balanced or negative to the corridor at 4 ac/hr.”

111. In relation to the item 13 dealing with the single bedroom ventilation, Multiplex simplified the “Description of the Agreed Resolution” so that it stated that NHSL and Project Co agreed that the item was closed and the agreed technical solution approved through RDD was 4 ac/hr within singled bedrooms and 10 ac/hr within ensuites.
112. By the end of September 2018, the Technical Schedule was agreed between NHSL, IHSL and Multiplex. The Technical Schedule had been exchanged

between the parties' respective legal teams. The agreed Technical Schedule contained the same text in respect of the 4-bed ventilation issue (which was item 7 in the Technical Schedule) as had originally been prepared and issued by NHSL on 22 June and amended on behalf of Multiplex (to reflect the other 6 No. 4- bed rooms that were not being changed) in July 2018.

Discussions from July 2018 and the Additional List of 34 Material Outstanding Items

113. The parties' discussions on the front-end draft Settlement Agreement continued through July 2018 onwards. This involved discussing complex legal, financial and technical issues.
114. What followed from July 2018 onwards was a further lengthy period of very complex and challenging negotiations (which continued right up to February 2019 when SA1 was ultimately executed). However, those discussions on SA1 did not concern the issue of the 4-bed ventilation resolution because that resolution had already been agreed and had been implemented by Multiplex at its own cost and risk. Likewise, the other 80 items on the Technical Schedule had largely been addressed and resolved by Multiplex.
115. Those complex discussions covered a wide range of commercial issues. Throughout July and August 2018 there were difficult discussions around the funding of the proposed commercial resolution and the different financial contributions and compromises to be made by each of the parties. At that time NHSL were still progressing their business case with the Scottish Government for approval of the commercial deal (NHSL completed their governance with the Scottish Government sometime in early August 2018). There were complex discussions around the extent of the waiver contained in the draft settlement agreement and the claims that were being released by way of settlement in the context of the 81 Disputed Items.

116. A key element for NHSL was for IHSL to achieve an Actual Completion Date on or by 31 October 2018. The parties were endeavouring to finalise the Project Agreement settlement agreement by late August in order to meet that targeted completion date. On 20 August 2018, Susan Goldsmith issued an e-mail to Stephen Gordon, Tony Rose and Richard Osborne advising that, despite the collective efforts and aspiration to get the settlement agreement finalised, it was NHSL's view that there was still a significant amount to do, both in relation to finalising the Settlement Agreement and reaching completion by 31 October 2018. Susan also mentioned in that e-mail that two of the key concerns that NHSL had were around drainage and cable calculations.
117. Then in a Technical Meeting on 23 August 2018 to discuss the 81 Disputed Items, Brian Currie made reference to a Material Outstanding Issues Schedule. Brian's view was that whilst the settlement agreement resolved the 81 Disputed Items it did not resolve all items required to achieve what NHSL considered to be a compliant completion. There were 34 further items on NHSL's list of Material Outstanding Issues. Examples of those issues included the drainage sump, the heater batteries and void detection. Each of those items had significant cost and programme implications which would preclude a completion by 31 October 2018. These issues had the potential to result in further disputes regarding completion criteria only six weeks prior to the targeted planned Completion Date of 31 October 2018.
118. In September 2018 there were still three main workstreams on-going in order to reach a concluded settlement. First, there was the legal workstream which essentially concerned the drafting of the front-end Settlement Agreement and involved the engagement of the parties' legal teams. Second, there was the financial stream which concerned the complex arrangements around the funding of the commercial settlement, for example IHSL's injection of additional sub-debt. Third, there was the technical workstream. Up to August/September 2018 the technical workstream had mostly addressed the 81 Disputed Items in the Technical Schedule. The agreed solution to those items had largely been agreed by September 2018. The key technical issues in September 2018 were

different issues relating to the cable calculations, the void detection works and drainage i.e. issues which had arisen through NHSL's additional list of 34 items on 23 August.

119. There were no on-going discussions on the 4-bed ventilation or single bedroom ventilation in that period because the ventilation works to provide a negative/balanced pressure regime with 4ac/hr for the 14 No. listed rooms had been completed by Multiplex.

120. IHSL was heavily engaged in discussions and meetings with Multiplex and NHSL throughout September 2018 because completion was still being targeted to take place on 31 October 2018. By mid-September, there were still a number of key commercial issues on the front-end Settlement Agreement still outstanding that required to be resolved. There was still work being done on the finance stream. In relation to the technical issues there was work being done on the cable calculations, the void detection works and the drainage. IHSL's view in mid-September 2018 was that, in order for a settlement to be reached in the timescales available, the drainage issue should be carved out from the existing proposed agreement and drainage should be dealt with in a separate settlement agreement. NHSL appeared to be in agreement with that proposal and agreed to carve out the drainage issue from the proposed settlement agreement and to deal with drainage separately.

121. NHSL issued a revised mark-up of the settlement agreement on 20 September 2018 which IHSL and Multiplex felt had included drafting and principles that had not previously been discussed between the parties. More particularly, it became even more evident that the drainage was now a particularly significant issue for NHSL. IHSL's and Multiplex's view was that the drainage issue should not impact upon the building being certified as complete by the Independent Tester and was capable of being resolved post-Completion but before the hospital was opened to patients. This was against the background where the Temporary Occupation Certificate (dated 10 September) had been issued by the Council's

Building Control team on 21 September 2018. The parties had been working on the basis that the drainage could be addressed in a separate agreement.

122. The parties (NHSL, IHSL, Multiplex and the Funders) were working very hard to find solutions to the outstanding issues and were engaged in intensive discussions. However, by 21 September 2018 the discussions had reached an impasse with the drainage being a fundamental issue between NHSL and Multiplex. IHSL circulated what it proposed as a compromise solution to re-engage the parties and progress matters. This included a proposal to deal with the drainage issue.
123. It was around this time in September 2018 that Peter Reekie of Scottish Futures Trust assisted with facilitating the parties' discussions and helped parties address the impasse. Peter provided valuable and constructive input to help the parties seek to bridge their divides. Peter's assistance helped the parties to move matters along and get the discussions moving again.
124. On 5 October 2018 Wallace Weir and I met with Multiplex and BYES to discuss Multiplex's revised drainage proposals. It was hoped that this proposal would move matters significantly forward and clear some paths towards the conclusion of the settlement agreement although there were still some commercial issues outstanding at that time. Multiplex and NHSL were engaged in direct discussions on the drainage proposal, with Multiplex addressing NHSL's queries and updating their proposal.
125. Meetings were arranged with NHSL in mid-October to discuss the technical updates (which included the drainage issue) with separate meetings teed up to discuss the outstanding commercial matters. A key technical meeting took place on 10 October 2018 at which the list of 81 Disputed Items contained in the Technical Schedule was discussed (the vast majority of those were agreed) as were the additional 34 items on the Material Outstanding Matters list. The key technical issues being discussed at that Technical Meeting on 10 October

remained the drainage, void detection, cable calculations and heater batteries and the additional 34-item list of Material Outstanding Matters list.

126. Towards the end of October 2018, it was evident that NHSL wanted absolute technical and programme certainty in relation to the main outstanding elements that were being proposed to be undertaken post completion, namely the void detection, heater batteries and basement sump drainage.
127. As we approached the 31 October 2018 target for Actual Completion, it was apparent that a settlement agreement was unlikely to be concluded by the targeted date.
128. The discussions around the drainage, heater batteries and void detection issues continued into November 2018. A further Technical Workshop was held on 5 November 2018 which was attended by representatives from NHSL, IHSL, Multiplex and BYES and a raft of other technical advisers to discuss those three key issues and other technical issues.
129. In around mid-November, given the delays in reaching a concluded settlement and the risk that the outstanding technical issues, particularly the drainage, could delay matters further, IHSL developed a further Commercial and Technical Proposal. That Proposal was first issued to NHSL on 13 November 2018. The proposal was further developed following meetings with NHSL where the drainage was again highlighted as a key concern. The revised proposal was issued to NHSL on 18 November 2018 and suggested that an agreement was entered into between NHSL and IHSL in relation to the sign-off of the 4-bed ventilation works. Confirmation that the works had been completed in accordance with the Agreed Resolution would be provided by the Independent Tester. On execution of that agreement, it was proposed that NHSL would pay the sum of £6M. Simultaneously, all parties would continue to work together to finalise the Settlement Agreement. Actual Completion would be triggered by the Independent Tester issuing the Certificate of Practical Completion when all the outstanding works had been completed, with the exception of the drainage,

void detection and heater batteries. NHSL would commence payment of the full Unitary Charge on the Actual Completion Date and BYES would commence provision of the Services on the Actual Completion Date.

130. It was proposed that this suggested 4-Bed Ventilation Agreement could be agreed and documented by 23 November with Funder consent requested by 30 November 2018. This was proposed by IHSL because the 4-bed ventilation works had all been completed and was potentially capable of resolution separately from the other issues which were holding up the wider settlement. IHSL's proposal in that form was not adopted.
131. On 5 December 2018 I sent an update to the IHSL team on the drainage issue. Multiplex had developed its proposal further and this proposal was being discussed with NHSL and BYES. There was discussion around making a concerted effort to get the technical solution on the drainage signed off before Christmas 2018.
132. A further Proposal Paper was in circulation in early December 2018 entitled "Final Commercial and Technical Proposal for Agreement" and dated 7 December 2018. This had been exchanged between the parties' respective legal teams and revised to reflect the on-going discussions. This was a high-level document which set out the key principles relating to the technical and commercial aspects of the settlement. In relation to the commercial issues, it provided that the Actual Completion Date would be triggered by the Independent Tester issuing the Certificate of Practical Completion when all outstanding works had been completed and certified by the Independent Tester pursuant to the provisions of the Project Agreement and Settlement Agreement except for the three outstanding material technical matters which were drainage, void detection and heater batteries. The Settlement Agreement would document, amongst other things, the technical solutions for those three outstanding material technical matters.

133. The terms of the Settlement Agreement could not be finalised, however, until the technical matters had been resolved. There was a drive to seek to agree the front-end Settlement Agreement prior to Christmas 2018. The Settlement Agreement would then be executed once the technical information had been finalised – which NHSL anticipated was likely to be January 2019.
134. I attended a further Technical Workshop on 12 December with NHSL and Multiplex attendees at which we discussed the “Material Outstanding Matters Schedule” which was also referred to as the “34 Item List”. We discussed in that meeting how the list had been prepared by NHSL in the summer of 2018 to detail technical matters which were of a concern to NHSL and which were to be recorded in the Settlement but would sit outside of the “Agreed Resolution” (which applied to the 81 Item list). However, with the passage of time (bearing in mind we were now six months on), a number of the items were closed or no longer relevant. We therefore reviewed all items on the list of 34 items and agreed whether or not they required to be documented in the settlement agreement or whether they were appropriately covered elsewhere or no longer considered to be an issue. Of the 34-item list, we identified at that Technical Workshop that there were five items which required to be included in the settlement agreement. These were: basement pump sump drainage; heater batteries; void detection; external pump sump drainage; and RDD Status C items. We agreed how those five issues would be addressed in the settlement agreement.
135. I also circulated that same day (by e-mail dated 12 December 2018) an Information Deliverables Schedule to the NHSL and Multiplex teams which set out the recorded actions/information to be provided as discussed at the Technical Workshop. The Information Deliverables Schedule covered the external drainage sump, basement drainage sump and heater batteries. A separate Technical Workshop had been arranged for the following day to discuss the void detection works.

136. I was updating and briefing the Funders of the discussions at those Technical Workshops throughout this period.
137. On 19 December 2018, NHSL wrote to IHSL with: (i) two copies of an Amendment Agreement in relation to a one-month extension of the longstop date under clause 40.1.2 of the Project Agreement (the “Longstop Amendment Agreement”); and (ii) two copies of a “Final Commercial Technical Proposal dated 13 December 2018” (although the signed Proposal was actually dated 19 December 2018) between NHSL and IHSL which was to form the basis of agreeing a settlement agreement in respect of the Project in early 2019 **(A47272810 - NHSL Letter dated 19 December 2018 - Bundle 13, Volume 9 – Page 253)**. The letter stated that NHSL had only entered into the Longstop Amendment Agreement because of the progress achieved between NHSL and IHSL as outlined in the non-binding Commercial and Technical Proposal. The Commercial and Technical Proposal was signed on behalf of NHSL by Susan Goldsmith.
138. The signed “Final Commercial and Technical Proposal” set out the principles on the technical and commercial issues to be reflected in the Settlement Agreement. The Proposal noted the following principles (amongst others) with regards to the commercial issues:
- i. The Actual Completion Date would be triggered by the Independent Tester issuing the Certificate of Practical Completion when all the outstanding works had been completed and certified by the Independent Tester pursuant to the provisions of the Project Agreement and the Settlement Agreement.
 - ii. The Independent Tester’s contract would be varied to enable the Independent Tester to issue the Certificate of Practical Completion based on the agreed technical solutions set out in the Settlement Agreement and certify when the technical solutions for the drainage, void detection and heater batteries had been constructed, tested and commissioned (referred to as “Final Certification”).

- iii. The Settlement Agreement would document the technical solutions for the drainage, void detection and heater batteries.
- iv. The Settlement Agreement would introduce a new Event of Default entitling NHSL to terminate the Project Agreement in the event that Final Certification was not granted by the Independent Tester by an agreed longstop date.
- v. The Settlement Agreement would provide milestones for payment of the Settlement Sum; and
- vi. NHSL would commence payment of the full Annual Service Payment on the Actual Completion Date and BYES would commence the provision of the Services.

139. As noted above, the signed "Final Commercial and Technical Proposal" (and subsequently the signed SA1) provided for the Certificate of Practical Completion to be issued which triggered payment of the Service Charge. This was all in accordance with the terms of the Project Agreement. NHSL was in occupation of the hospital upon the Certificate of Practical Completion. NHSL may not have been accepting patients immediately upon the Certificate of Practical Completion but that was never the intention. There was always going to be a period of a few months between the Certificate of Practical Completion being issued and NHSL's "go live" date when the RCHYP/DCN would be open to patients. In that period, NHSL had planned to undertake its own works and commissioning. NHSL paid the Service Charge because the Project had been certified as complete and because NHSL and, in turn, BYES had commenced the provision of the Services. What SA1 did allow was for Multiplex to undertake the agreed technical resolution for the drainage, heater batteries and void detection to take place after the Certificate of Practical Completion had been issued and by a contractual longstop date because the parties had agreed that completion was not dependent on those works being completed. Those works were undertaken in parallel with NHSL's own works and commissioning in readiness for its go live date.

140. The Technical Workshop on the void detection works took place on 13 December 2018. I circulated an updated Information Deliverables Schedule complete with the noted actions for the void detection works by e-mail to NHSL and Multiplex dated 14 December 2018.

Discussions From Early 2019 to Execution of SA1

141. The parties' discussions continued in January 2019 following the Christmas and New year break.

142. On 14 January 2019, I issued the then current draft of the settlement agreement to the Independent Tester. NHSL and IHSL had agreed that it would be helpful if the Independent Tester was provided with an advanced copy of the settlement agreement to help the Independent Tester understand the proposed agreement and, in particular, the proposed amendments to the Independent Tester's appointment. I also gave the Independent Tester a copy of the draft Technical Schedule which addressed the list of 81 items. That draft was still dated September 2018 because those issues had all been agreed by that date the previous year.

143. In the parties' discussions in mid-January Multiplex proposed one minor amendment to Item 7 regarding the 4-bed ventilation in the Technical Schedule by deleting one of the "MPX Transmit" references. With that one minor exception the Agreed Resolution for the 4-bed ventilation had not changed since the previous summer.

144. As at 18 January 2019, the parties had targeted for all information including Technical Schedules to be completed and issued to the Funders by 25 January 2019 (this would initiate the Lenders' due diligence) and targeted the date for execution of the settlement agreement and Actual Completion Date (the issue of the Certificate of Practical Completion) to occur on 7 February (or before if possible).

145. The parties continued their discussions in order to meet those targeted dates.
146. I received the final agreed form of the Technical Schedule from NHSL's legal advisers on 28 January 2019. I circulated this to the Multiplex team and their legal advisers moments after receiving it. Item 7 of the Technical Schedule remained unchanged.
147. On 7 February 2019, the Independent Tester issued a letter to IHSL confirming that they were in a position to progress their Certificate of Practical Completion and Commissioning Completion in line with the Project Agreement as modified by the concluded SA1 provided that the signed copy of SA1 (which signed copy was to be provided to the Independent Tester in advance of the Certificates being issued) did not differ from the draft copy of SA1 that the Independent Tester had been given (**A47272812 – Letter from Independent Tester dated 7 February 2019 - Bundle 13, Volume 9 – Page 256**). The Independent Tester was ready to issue the Certificates on 7 February 2019 (whereas SA1 was not ultimately executed until 15 days later on 22 February).
148. The original targeted dates for concluding the documents and achieving the Actual Completion Date had been missed. Notwithstanding that the Certificate of Practical Completion was ready to be issued on 7 February, as late as 13 February NHSL requested changes to the drafting around the drainage and related deductions i.e. after the Lenders were a significant way into their credit approval process with final Technical and Legal reports being issued the same day as NHSL requested further changes. This led to further discussions with Susan Goldsmith at NHSL on 14 February.
149. SA1 was eventually executed by NHSL and IHSL on 22 February 2019. The Certificate of Practical Completion was issued by the Independent Tester in accordance with the terms of the Project Agreement as amended by SA1 that same day. IHSL and Multiplex also entered in an equivalent downstream settlement agreement pursuant to the Construction Contract on 22 February 2019.

150. The void detection, drainage and heater batteries works were all carried out after the Actual Completion Date and were completed before the longstop date contained in SA1.

The January 2019 Correspondence

151. I have been asked about the letter which NHSL issued to Wallace Weir at HCP dated 28 January 2019. That letter from NHSL attached a copy of the 'Director-General Health & Social Care and Chief Executive' letter dated 22 January 2019 (the "CEL Letter") which had been issued to NHS Chief Executives (and copied to Directors of Estates). I was not directly involved at the time in this correspondence or in preparing IHSL's response to it. I have subsequently become aware of it. I have read IHSL's Response to the Inquiry's Provisional Position Paper 6 and, in particular, section 7 of that Response. My understanding of the January 2019 correspondence accords with IHSL's comments in that Response.

152. To IHSL's Response I would add, however, that my understanding of the CEL Letter was that it was issued against the background of issues which had arisen at the QEUH in Glasgow, and particularly with the concerns around pigeon droppings and vermin in the plantrooms. The queries raised in the CEL Letter sought confirmation of certain control measures (mainly related to plantrooms) and added that, in addition to those control measures the Strategic Facilities Group had undertaken to share best practice on relevant Standard Operating Procedures and anti-pest management.

153. That correspondence was subsequently followed up in e-mail correspondence from Stuart Davidson (NHSL's Contracts Manager) to Wallace Weir dated 1 April 2021 (**A47272811 – Email from NHSL to IHSL dated 1 April 2021 - Bundle 13, Volume 9 – Page 257**). That e-mail stated that following reports of patient infection linked to fungus from bird droppings (at QEUH), HFS was asked by the Scottish Government Director General Health to produce guidance on steps to control the risk of fungal contamination of patient areas

from bird droppings in plant rooms and ventilation systems. Stuart's e-mail attached the proposed guidance and he explained that the guidance attempted to strike a risk based balance approach to managing the bird dropping risks associated with the many ventilation systems that NSHL had in operation.

154. IHSL and, in turn, BYES are not responsible for pest control at the RHYCP/DCN (that remains NHSL's responsibility).
155. I cannot comment on why some of the Core Participants might have suggested that this correspondence might shed light on the evidence that the Inquiry heard at the hearing in May 2022. The correspondence appears to me to have been issued in the context of the pigeon droppings in the air ducts at QEUH and anti-pest management. It does not relate to the design of the ventilation systems or to Multiplex's or IHSL's views on the interpretation of responsibilities under the Construction Contract or the Project Agreement.

Supplemental Agreement No.2 (SA2)

156. The Inquiry legal team have specifically invited IHSL to address the issues of NHSL's approach to IHSL to undertake additional work to achieve 10ac/hr with positive pressure in Critical Care.
157. IOM commenced independent validation testing and inspection on the ventilation systems on the Project around mid-June 2019. IOM produced a 'Ventilation Validation' report following their verification activities. As part of their inspection, IOM carried out various tests, including the airflow measurements at supply and extract grilles and pressure differential measurements. It appears from the contemporaneous e-mails at the time between Mott MacDonald and NHSL that IOM were checking the systems against the SHTMs and not the Project Agreement as amended by SA1 (and the Agreed Resolution contained in SA1).

158. IHSL was subsequently informed by NHSL that IOM had considered that the pressure regimes and the air change rates in the 4-bed rooms and single bedrooms in Critical Care did not meet national standards contained in SHTMs. I have commented in section 2 above on the terms of SA1 and the Agreed Resolution relating to the ventilation in the 4-bed rooms and single bedrooms.
159. IOM subsequently issued a report entitled 'Witnessing of theatre rebalancing and validation summary report' which was issued on 15 July 2019 (**A47272809 – MT18IH - Bundle 13, Volume 9 – Page 259**). At the foot of page 5 of the IOM report, under the section headed 'High Dependency areas', IOM stated that testing of the high dependency areas identified that the air change rates and pressure cascades did not meet the requirements. IOM stated that in early discussions with NHSL's Technical Advisers, Mott MacDonald Limited, IOM were advised that there was a derogation in place which reduced the requirements from 10 ac/hr to 4.
160. Following various joint meetings and workshops, at an all-party meeting on 2 July 2019 with NHSL, their Infection Control team, the Project Team and senior board members, an interim solution was reached for enhancing the ventilation in the Critical Care areas (**A47272814 – MT19IH - Bundle 13, Volume 9 – Page 281**) (**A47272821 – Air Change Options Critical Care 2 June 2019 – Bundle 13, Volume 9 – Page 284**). That interim solution involved closing ventilation to the 4-bed bay "1-B1-063" and single bedroom "1-B1-037" and redistributing the air to the other patient locations within critical care to provide 7 ac/hr to 4 no. single rooms and 5 ac/hr to 2 no. 4-bed bays and 1 no. 3 bed bays. The RHCYP/DCN had greater capacity in Critical Care than the existing Victorian hospital at the Edinburgh Sick Kids Hospital. Even with closing two rooms the capacity at RHCYP would still have equalled that at the existing Sick Kids i.e. the RHCYP/DCN would still have been able to fully accommodate the patients from the Critical Care department at the existing Sick Kids.
161. Ordinarily in a PFI/PPP project, where the authority instructed a Change after Practical Completion and during the service delivery phase, that Change would

be instructed through the Project Agreement and would be implemented by the Services Provider through the Services Agreement. Following the IOM report, however, NHSL and IHSL commenced discussions with Multiplex to carry out the interim solution works. Multiplex were prepared to carry out these works (although they were not contractually obliged to do so). The interim solution works were expected to take place over 3 days beginning on 4 July 2019.

162. This interim solution was instructed by NHSL in an email from Brian Currie to Wallace Weir (HCP) and Darren Pike (Multiplex) dated 3 July 2019 **(A47272818 – MT20IH - Bundle 13, Volume 9 – Page 285)**. NHSL instructed IHSL and, in turn, Multiplex to “proceed with adjusting the installed ventilation system in Critical Care to achieve air change rates” in order to provide a minimum of 7 air changes/hour in all single bedrooms (with the exception of room 1 B1 037) and 5 air changes/hour in all four bedded rooms (with the exception of room 1 B1 063).
163. Wallace Weir responded to NHSL that same day explaining that IHSL was fully supportive of NHSL’s process to implement an interim and permanent solution to the ventilation challenges in the critical care areas. However, as part of that, Wallace also expressed some of IHSL’s concerns, such as confirmation as to whether NHSL would cover the costs of implementing the interim solution and whether NHSL would commit to covering the costs of the design of the permanent solution.
164. On 4 July 2019, however, the then Cabinet Secretary for Health and Sport, Jeane Freeman, announced that the RHCYP would not open as planned.
165. I attended an all-party design meeting on 9 July 2019 where it was discussed that 4 no. 4-bed rooms and 5 no. single bedrooms in Critical Care (9 rooms in total) were to be changed to meet the guidance in STHM 03-01. NHSL were to confirm their design requirements regarding STHM 03-01 because they may have wished the pressure regime to remain negative/balanced whereas STHM 03-01 stated it should be positive relative to the adjacent corridor. Multiplex

stated at that meeting that they would need absolute clarity on the technical scope/specification. NHSL were to undertake consultation on the design requirements internally and confirm their position. It was discussed at that meeting that NHSL planned to issue a Board Change but in doing so they would reserve their position.

166. Multiplex, IHSL and NHSL continued those discussions to review NHSL's requirements for the critical care ventilation. A programme of ventilation meetings was commenced after the delayed opening of RHCYP in July 2019.

167. IHSL had advised NHSL that no physical works could progress without a Board Change. As part of that, and in order to assist NHSL, IHSL in conjunction with Multiplex provided some options to NHSL about how the critical care enhanced ventilation works could be progressed. The three options proposed were as follows:

- a) Option 1: High Value Change (Schedule 16 (Change Protocol))
- b) Option 2: Amended Process by Agreement
- c) Option 3: Depart from High Value Change Process

168. IHSL's and Multiplex's preference was Option 3 because they considered that a more flexible approach best achieved the overall objective to facilitate the migration of RHSC into the new facilities at the earliest opportunity. The Schedule 16 Change Protocol set out a fixed procedure for valuing and processing the Change which, in the circumstances, I thought was more likely to delay matters. With Multiplex already on board, the parties anticipated that the enhanced ventilation works to implement NHSL's change to the ventilation in Critical Care could be undertaken relatively quickly. By departing from the procedure in Schedule 16 and adopting a more flexible procedure for agreeing the scope and the design development and approval process of the Change, it was hoped that the works could be undertaken more quickly.

169. In mid-August, we had a positive meeting with NHSL and Multiplex. Susan Goldsmith presented a proposal to IHSL which helped with the design and installation of the Critical Care ventilation amendments. The key principles outlined by Susan Goldsmith included that:

- a) NHSL would take responsibility for costs associated with the requested amendments to the Critical Care.
- b) NHSL would acknowledge the Critical Care ventilation as designed and built and compliant with the contract; and
- c) NHSL would issue a Letter of Intent to allow the design works to commence.

170. On 30 August 2019, we received an initial draft Board Change relating to the paediatric critical care ventilation (High Value Change Notice 95 (“HVC 95”) **(A47272819 – High Value Change Notice 095 dated 30 August 2019 - Bundle 13, Volume 9 – Page 288)**). HVC 95 required the ventilation system or systems to “deliver 10 air changes/hour at +pa as per SHTM 03-01.” In addition to the works to be undertaken in the Critical Care department, NHSL also took the opportunity to instruct works which enhanced the ventilation relating to the haematology and oncology department (also known as the “Lochranza Ward”). High Value Change 96 was issued on 6 September 2019 in relation to those works (“HVC 96”) **(A47272820 – High Value Change Notice 096 dated 6 September 2019 - Bundle 13, Volume 9 – Page 290)**. The requirements here were also for the ventilation systems to “contain 10 air changes/hour at +10pa as per SHTM 03-01”.

171. Generally, good progress was being made by all parties in resolving the issues that had been identified in relation the ventilation systems. In addition to the ventilation issues in the Critical Care department, Multiplex were also working though the IOM’s list of issues that IOM had identified as needing to be addressed. The issues in those Ventilation Action Logs were being progressed and closed out by Multiplex in parallel to the discussions for procuring the works to implement HVC 95 (Critical Care) and 96 (Lochranza Ward).

172. Towards the end of August 2019, however, the discussions with Multiplex to undertake the enhanced ventilation works in Critical Care and the Lochranza Ward fell through. NHSL had originally agreed to provide certain protections but when these were subsequently removed Multiplex considered that it was unable to undertake the works without those protections being in place.
173. After the discussions with Multiplex fell through, IHSL commenced discussions with BYES to explore whether BYES could undertake the enhanced ventilation works in Critical Care and the Lochranza Ward. However, IHSL considered that BYES was busy enough with the service provision at the RHCYP/DCN without adding the responsibility of significant design and construction works to the ventilation systems to their workload. Those discussions with BYES came to an end and instead IHSL looked at third party providers.
174. IHSL's MSA Provider, George Street, contacted independent third parties to gauge market interest in carrying out the enhanced ventilation works in Critical Care and the Lochranza Ward. It was through those discussions with the marketplace that Imtech's name came up. IHSL commenced discussions with Imtech in late 2019. Imtech prepared a detailed Project Proposal which was presented to NHSL. It was agreed with NHSL that Imtech would deliver the works relating to the High Value Changes 95 and 96 (i.e. the ventilation works to Critical Care and the Lochranza Ward).
175. On 13 November 2019, we wrote to NHSL (**A47272822 – Letter from IHSL dated 13 November 2019 - Bundle 13, Volume 9 – Page 293**) stating that, following on from the productive discussions that had taken place, IHSL agreed with NHSL's proposal that High Value Changes 95 and 96 should be aligned. IHSL also noted that, in order to meet the challenging timetable set by the Scottish Government, it had been agreed that the most pragmatic way forward to progress the High Value Changes would be to agree the process and appropriate programme for the implementation of the High Value Changes, notwithstanding the provisions of Schedule 16 of the Project Agreement.

176. IHSL's proposal confirmed (amongst other points) that IHSL would appoint Imtech to deliver the works and Imtech, in turn, would appoint Hoare Lea as designer. BYES would support Project Co in the delivery of the works through facilitation once the works had been completed. At this point, Imtech were able to commence the survey and early design works within a week, subject to NHSL and IHSL entering into the "Initial Engagement Agreement". The Initial Engagement Agreement to be entered into between NHSL and IHSL would enable IHSL to instruct Imtech to immediately commence the survey and design work. IHSL's proposal also provided that NHSL and IHSL would work collaboratively and in good faith to enter into a supplemental agreement which would set out the requirements for the High Value Changes.
177. IHSL and NHSL did agree the Initial Engagement Agreement in relation to the ventilation works. This was signed by NHSL on 16 December 2019 and by IHSL on 17 December 2019 (**A47272817 – Initial Engagement Agreement dated 12 December 2019 - Bundle 13, Volume 9 – Page 297**). The Initial Engagement Agreement stated that it was NHSL's wish (but not an obligation) to appoint IHSL in respect of the "Ventilation Works" but that neither party was yet in a position to enter into a contract to instruct the Ventilation Works (anticipated to be by way of SA2). NHSL instructed IHSL through the Initial Engagement Agreement to commence the design and survey works (defined as the "Advance Design Works") which were required in order to prepare the detailed design for the Ventilation Works. NHSL undertook to pay IHSL its reasonable and properly incurred costs in carrying out the Advance Design Works.
178. The Initial Engagement Agreement allowed IHSL to instruct Imtech to commence the Advance Design Works.
179. IHSL had written to NHSL dated 26 November 2019 setting out a brief summary of the discussions that had taken place with Multiplex and with BYES but also highlighting that with IHSL's proposal to appoint Imtech, NHSL

accepted that the nature of the relationship with Imtech was through a standard construction industry form of contract (**A47272823 – Letter from IHSL to NHSL dated 26 November 2019 - Bundle 13, Volume 9 – Page 335**). The letter reflected that it had previously been agreed between NHSL and IHSL that given the nature and scale of the works, the limited market interest and challenging programme goals, it would not be possible to impose PPP/NPD levels of risk on a third-party contractor. Consequently, IHSL required NHSL to accept that Imtech’s liabilities would be limited to standard NEC provisions.

180. On 5 December 2019, NHSL instructed a change to the works through High Value Change Notice 107 (“HVC 107”) which provided that multi-bed rooms and singled bedrooms in Critical Care were to be positive pressure with an air change rate of 10 ac/hr. HVCs 95 and 96 were rolled into HVC 107 which instructed the changes to the ventilation systems within the Critical Care and the Lochranza Ward. The enhanced ventilation works were instructed as a High Value Change by NHSL through the Project Agreement because they changed the requirements of the Project Agreement as amended by the Agreed Resolution set out in SA1.
181. IHSL subsequently progressed the procurement discussions with Imtech and both parties entered into an Agreement for Ventilation Works which was based on the NEC4 Option E standard form of contract.
182. NHSL and IHSL ultimately entered into SA2 on 5 August 2020. SA2 essentially gave effect to HVC 107. SA2 reflected NHSL’s instruction to amend the ventilation system from 4 ac/hr to 10 ac/hr with an associated change to the pressure regime (these were captured within HVC 107). IHSL had sought specific assurances from NHSL and its technical advisers to confirm that NHSL’s requirements had been definitively addressed. The terms of SA2 reflect the assurances that IHSL had sought.
183. Once the SA2 ventilation works were complete, full patient services transferred into the new hospital in March 2021. It is worth noting that the hospital had a

phased occupation. During week commencing 20 April 2020, the DCN Outpatients department was handed over to NHSL. During week commencing 6 July 2020, the Clinical Administration Teams occupied the hospital. During week commencing 13 July 2020 the DCN Inpatient Teams occupied the hospital. On 15 and 16 July 2020 the DCN was open to patients. During week commencing 20 July 2020 Children's Outpatient Services commenced. The RHCYP/DCN became fully operational on 23 March 2021 (when the Childrens Services Inpatient and CAMHS department opened).

Declaration

184. 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.