

## Scottish Hospitals Inquiry (the “Inquiry”)

Royal Hospital For Children and Young People and Department of Clinical Neurosciences, Edinburgh  
 (“RHCYP/DCN”)

Closing Submission on behalf of IHS Lothian Limited (“IHSL”)

### Hearings covering the period from the commencement of the Project to Financial Close

#### 1. INTRODUCTION

- 1.1 This is the Closing Submission on behalf of IHSL in relation to the two hearing sessions which have taken place in relation to RHCYP/DCN. The first session took place in May 2022 and covered two broad themes: (i) the theory and practice of ventilation in hospitals; and (ii) the background to the project for the RHCYP/DCN. The second session took place in April and May 2023 and covered the period from the start of the procurement exercise to Financial Close. The Inquiry has not heard evidence regarding the period following Financial Close which may have a significant bearing on the matters addressed at the two hearing sessions particularly regarding how parties resolved disputed issues and ambiguities regarding certain matters relating to ventilation (in particular, through Settlement Agreement No.1).
- 1.2 IHSL is the Project Company (i.e. the special purpose vehicle) in relation to the RHCYP/DCN, Edinburgh and is a Core Participant in the Inquiry. IHSL was granted leave to appear at the hearings in May 2022 and April/May 2023.
- 1.3 This Closing Submission has been prepared in response to the Closing Submission by Counsel to the Inquiry dated 2 June 2023 and circulated to Core Participants by the Inquiry on 5 June 2023 (“**Counsel’s Closing Submission**”). It supplements IHSL’s responses to the Inquiry’s Provisional Position Papers 1, 2, 3 and 4. This Closing Submission does not seek to respond to Counsel’s Closing Submission on a paragraph-by-paragraph basis. IHSL broadly adopts the contents of Counsel’s Closing Submission as a fair and accurate summary of the evidence heard on the key issues subject to the comments raised in this Closing Submission. Consequently, this Closing Submission is limited to highlighting: (i) issues from the witness evidence and associated documentation which are not referred to in Counsel’s Closing Submission, but which IHSL considers are relevant in summarising the key issues arising from the two hearing sessions; and (ii) any specific points in Counsel’s Closing Submission which IHSL wish to comment particularly upon or challenge.
- 1.4 This Closing Submission adopts the same section headings used in Counsel’s Closing Submission. It does not respond to every section identified in Counsel’s Closing Submission. The sections in Counsel’s Closing Submission which this Closing Submission does comment on are as follows:

- 1.4.1 Ventilation requirements in hospitals;
  - 1.4.2 The Activity Database System, Room Data Sheets and Environmental Matrices;
  - 1.4.3 The Reference Design;
  - 1.4.4 Errors in the Environmental Matrix;
  - 1.4.5 The Procurement Exercise; and
  - 1.4.6 Findings and Potential Recommendations.
- 1.5 IHSL has had the opportunity to review the draft Closing Submissions exchanged between the Core Participants on Friday 16 June. IHSL addresses the draft Closing Submissions exchanged by NHS Lothian (“**NHSL**”) and Mott MacDonald Limited (“**MML**”) in Sections 9 and 10 of this Closing Submission respectively.
- 1.6 Counsel’s Closing Submission states (at paragraph 3) that the central issue, in Counsel’s view, is the clarity of the procurement documents and the contract. Counsel highlights that it is not the function of the Inquiry to make any determination about parties’ rights and obligations or to resolve disputes between them as to the meaning of documents. Whilst IHSL understands why Counsel has identified that the clarity of the procurement documents and the contract are the central issue, the Inquiry should not lose sight of the equally significant issues that arose in the preparation of the Environmental Matrix by NHSL’s design team and the management of procurement in the period prior to and up to the issue of the Invitation to Participate in Dialogue (“**ITPD**”) documents to the prospective bidders.
- 1.7 IHSL agrees with Counsel’s comments at paragraph 26 of Counsel’s Closing Submission that whilst the views of witnesses on the intention of the provisions in the procurement documents and terms of the contract may be relevant to the issues the Chair requires to determine, the subjective views of witnesses in relation to the meaning of various documents should be disregarded.
- 1.8 IHSL does not seek to advance its position on the legal interpretation of the procurement and contract documents in this Closing Submission. Rather, it has confined itself to the witness evidence and to the summary of that evidence in Counsel’s Closing Submission.
- 1.9 Counsel to the Inquiry has invited the Chair to keep under review whether to request additional evidence in relation to this phase of the Inquiry. Should such evidence be requested and become available at a later date (either by way of witness statement, further documentation or oral evidence) IHSL would respectfully invite the Chair to allow Core Participants to make additional submissions if required.

## 2. EXECUTIVE SUMMARY

- 2.1 IHSL adopts the Executive Summary in Counsel's Closing Submission subject to the following comments.
- 2.2 Paragraph 5 of Counsel's Closing Submission states that NHSL intended the ventilation system at the RHCP/DCN to fully comply with the guidance set out in SHTM 03-01. With reference to TOR 1, Counsel notes that there was ambiguity in the contract in relation to whether the ventilation system required to fully comply with STHM 03-01. But, as stated at paragraph 201 of Counsel's Closing Submission, the concept of "*compliance*" with SHTMs is ambiguous. SHTMs are guidance that is open to interpretation. Engineers would not necessarily offer the same view on what "compliance" means. The guidance can be inconsistent and contradictory (hence the need to apply some priority to the raft of NHS standards and guidance in the event of inconsistency). The Inquiry has heard that ambiguities and inconsistencies are typical.
- 2.3 SHTM 03-01, which relates to ventilation, is no exception. It is not fully comprehensive (it does not cover every type of room in a hospital) and it is inconsistent in parts. SHTM 03-01 contains a summary of recommendations in Table A1 but it is clearly an oversimplification to extract and rely upon the figures contained in that table. The Inquiry has evidence that the recommendations in Table A1 are nuanced and are not to be applied blindly. Patient safety and care is not guaranteed by a number in a table. The relevant guidance requires to be considered as a whole system approach that is part of a quality-controlled briefing process that involves an informed client, engagement with clinicians and other stakeholders, relevant expert input, engineering judgement applied in dialogue with clinicians having identified the clinical function and use of the relevant spaces with the particular patient cohort in mind.
- 2.4 Clinical engagement is critical in identifying the environmental parameters of the relevant hospital spaces. That clinical engagement appears to have been undertaken by NHSL through the period when the original project was being capital funded (up to the end of 2010) and then through the reference design phase. Given that such extensive clinical engagement had taken place, the procurement programme was able to be compressed because the prospective bidders would not need to engage with the clinical teams. The lack of engagement between the bidding design team and the clinical teams appears to have been unusual. Without that clinical engagement it would not have been realistic for a prospective bidder or its designer to create the client's brief or establish the client's requirements. On RHCYP/DCN that clinical engagement had been carried out by NHSL prior to the ITPD documents being issued and the procurement process commencing.
- 2.5 Furthermore, the ITPD documents, ISFT documents and the Project Agreement qualified compliance with SHTMs in certain places such that the guidance gave way to NHSL's specific requirements. As

such, the statement that NHSL intended the ventilation system at the RHCYP/DCN to fully comply with the guidance set out in SHTM 03-01 is unclear and not free from ambiguity.

### 3. **VENTILATION REQUIREMENTS IN HOSPITALS**

- 3.1 Paragraphs 46 to 60 of Counsel's Closing Submission summarises the evidence on the relevant Guidance applicable to the issue of ventilation requirements in hospitals. Paragraphs 57 and 58 in particular refer to Table A1 of SHTM 03-01.
- 3.2 Paragraph 57 of Counsel's Closing Submission states that paragraph 7.13 of SHTM 03-01 Part A provides that the air change rates given in Table A1 have been found to give sufficient dilution to airborne contaminants, provided the mixing of room air is reasonably uniform. The recommendation in Table A1 for a general ward is 6 ac/hr and for critical care areas 10 ac/hr is recommended.
- 3.3 Paragraph 58 of Counsel's Closing Submission recognises that the number of air change rates per hour is not an exact science and that the regime set out in SHTM 03-01 is a compromise agreed between contributors. It would be an oversimplification, therefore, to say that if the air change rates are not followed that there will always be a risk to patients.
- 3.4 The history and summary of the relevant Scottish Guidance is addressed in the witness statement by Susan Grant (2023 Bundle 13 page 451). Ms Grant is a Principal Architect employed by Health Facilities Scotland ("**HFS**") which is part of NHS Scotland ("**NHSS**") Assure which in turn forms part of NHS Scotland National Service Scotland ("**NHS NSS**"). HFS is the responsible custodian for all Guidance for NHSS facilities. The NHSS Assure Director and deputy directors are responsible for those publications that fall under their expertise, such as Scottish Health Technical Memoranda ("**SHTMs**").
- 3.5 The context and the use of Table A1 in SHTM 03-01 was also addressed in Ms Grant's witness statement (2023 Bundle 13, page 471, paragraph 67). Ms Grant explained that Table A1 provided users with an aid-memoire but it should not be considered as a sole source of data for briefing and design. Table A1 should be read in conjunction, not only with the whole of SHTM 03-01, but also with the rest of NHS Guidance relevant to each project. In Ms Grant's experience Table A1 was often seen as the easy go-to place to find information with elements taken out of context.
- 3.6 Ms Grant emphasised to the Inquiry (2023 Bundle 13, page 473, paragraph 70) that patient safety and care is not guaranteed by a number on a table. NHS Briefing, Design and Delivery is a whole process, with a series of documents that requires multi-disciplinary clinical and Healthcare Built Environment ("**HBE**") experts to support it. Ms Grant explains that this process starts with questions such as:

*“what do we need to do clinically in that room? What are the risks? What quality standards are applicable? How will outcomes be measured/met? And what are the key components from a variety of guidance and ABD inputs that will allow us to meet the NHS’s overarching legal duty of care. Success is not a blind application of individual sections of NHS Guidance, as out of context, an individual element could breach a legal duty of care.”*

3.7 Ms Grant explains further (2023 Bundle 13, page 473, paragraph 71) that NHS Guidance could be taken out of context or alternative interpretations placed on a specific clause, table, parameter or value. For specific projects, the appropriate application requires each element of Guidance to be read as part of the key aims of the whole Guidance and ABD system and also relies upon the appropriate expertise and skills of the project team involved.

3.8 Ms Grant explains (2023 Bundle 13, page 476, paragraph 78) how, in Ms Grant’s view, guidance was to be applied to the multi bedrooms or the critical care areas:

*“... it should be Guidance and ABD as a whole system approach that is part of a quality controlled briefing process with an “informed client” and benefitting from both good stakeholder involvement and HBE expert support to enable successful decision making. NDAP & KSAR processes will also support this.”*

3.9 Ms Grant states (2023 Bundle 13, page 476, paragraph 80) that ambiguity and uncertainties are typical challenges in complex NHS projects. Indeed, Ms Grant’s witness statement identifies some of the inconsistencies and uncertainties evident in Table A1 itself (2023 Bundle 13, page 474, paragraph 73).

3.10 The recommendations in Table A1 require to be approached and handled with some caution, therefore. The recommendations in Table A1 are nuanced (not to be applied blindly) and require to be considered in light of the clinical activity taking place in the space and in consultation with the relevant stakeholders.

3.11 In addition to the difficulties with SHTM guidance outlined above, Counsel’s Closing Submission also identifies that there is a divergence of views between engineering professionals as to the interpretation of the content of Table A1 (paragraph 60 of Counsel’s Closing Submission).

3.12 Furthermore, the Inquiry also heard that the interpretation and application of Table A1 can also be down to individual experience and preference. For example, Colin Macrae’s personal preference was to have all mechanical ventilation in a hospital even though SHTM 03-01 and Table A1 expressly permitted natural ventilation or mixed mode ventilation where appropriate (Transcript, pages 33 and 34). The Inquiry has heard previously of some of the benefits that natural or mixed mode ventilation can provide (not least energy efficiencies) but personal preference may exclude the use of natural or mixed mode ventilation.

3.13 Mr Macrae told the Inquiry that the biggest problem with “these types of projects” (which IHSL understands to mean NHS projects of the type of RHCYP/DCN) is that the guidance is too open to interpretation, the table of rooms within SHTM 03-01 is not comprehensive enough and it doesn’t detail the different clinical or patient needs (Transcript, page 47).

3.14 Paragraph 59 of Counsel’s Closing Submission states that if the ventilation recommendations set out in SHTM 03-01 are to be departed from, this should be based on a risk assessment and submits that a ventilation system that does not comply with published guidance, and for which there has been no individualised risk assessment, is “defective” for the purpose of the TORs. IHSL notes this technical definition of “defective” adopted by Counsel. IHSL notes further that this view of what is or is not “defective” bears no reference to the terms of the Project Agreement or the contractual position thereunder. On this definition the works can fully comply with the contractual requirements and yet be considered “defective”. Indeed, a system can be “defective” in this sense even in a client’s brief. NHSL had decided upon departures from the Guidance prior to the issue of the ITPD documents to the proposed bidders without necessarily documenting those departures as derogations, for example in the relation to the temperature ranges (O’Donnell, Transcript, page 44). It will not necessarily be evident to prospective bidders what, if any, individualised risk assessment may have been undertaken by the procuring authority for derogations meaning that a brief issued by the authority may be defective from the outset (on the definition adopted by Counsel) notwithstanding a contractual obligation to meet that brief. It is also noted that clause 5.2.4 of the Project Agreement and paragraphs 2.3 of Volumes 3 of the ITPD and ISFT documents expressly permitted NHSL to specify something different from the NHS Guidance such as SHTMs (which are not in themselves mandatory) which indicates that departures from guidance are not inherently wrong and certainly not necessarily “defective”. Such departures would be considered “defective”, on Counsel’s definition, solely if the authority had not undertaken a risk assessment. Given the comments in the preceding paragraphs regarding the nature of SHTM 03-01, the general proposition that a ventilation system with no individual risk assessment would be “defective” because of its non-compliance with SHTM 03-01 is an oversimplification and inaccurate in any context other than that technical definition adopted by Counsel.

#### 4. **THE ACTIVITY DATABASE SYSTEM, ROOM DATA SHEETS AND ENVIRONMENTAL MATRICES**

4.1 The policy of the Scottish Government from 2006 was that the NHS in Scotland, when procuring new healthcare facilities, was to use the English Department of Health’s Activity Database (“**ADB**”) as an appropriate tool for briefing, design and commissioning or an equivalent of equal value (2022 Bundle 4, page 99 (2010 design policy) CEL 19).

4.2 NHSL did not use the ADB system as a briefing tool for the procurement of the RHCYP/DCN. Witnesses involved in the preparation of the reference design and procurement for NHSL told the

Inquiry that they had not been aware of the Scottish Government's policy in CEL 19 (Macrae, Transcript, page14; O'Donnell, Transcript, page 60).

- 4.3 Michael O'Donnell told the Inquiry that ideally room data sheets prepared using the ADB system and reviewed by clinical leads would be provided as client briefing information at the start of any healthcare project. Mr O'Donnell describes this as best practice (Transcript, page 67).
- 4.4 Mr Maddocks took a narrower view. In Mr Maddocks' view, the room data sheet is the only way for a client to inform the design team of their requirements and should be completed by the client or its advisers prior to conclusion of the construction contract (Transcript, page 90). Mr Maddocks considers that room data sheets should be generated early in the briefing and design process (2022 Bundle 6, page 66).
- 4.5 As stated at paragraphs of 72 and 73 of Counsel's Closing Submission, to facilitate communication about environmental parameters, engineers have devised the environmental matrix. This is a spreadsheet which gathers together in one place, and for all rooms in the building, certain parameters bearing upon its mechanical and electrical engineering systems. The parameters will typically be abstracted from guidance and be refined through client engagement to reflect project-specific requirements. The matrix can be used in this way to establish the client's brief for the ventilation system. The ADB and environmental matrices are not necessarily mutually exclusive (paragraph 74 of Counsel's Closing Submission). An environmental matrix is not usually intended to completely replace or supplant room data sheets for all purposes. The room data sheets provide all elements for a room briefing whereas an environmental matrix summarises only the environmental data (paragraph 75 of Counsel's Closing Submission).
- 4.6 Paragraph 83 of Counsel's Closing Submission states that it will be important to ensure that whichever method is used to decide upon environmental parameters for a hospital, it ensures those parameters meet the clinical needs of the hospital and are consistent with applicable guidance. This seems likely to require scope for sufficient engagement between engineers and clinicians to ensure a meaningful dialogue between them, capable of generating robust set of compliant and suitable parameters.
- 4.7 Reference is made to the draft Closing Submission provided by National Services Scotland and in particular paragraphs 3 to 5 thereof. Those paragraphs respond to paragraph 81 of Counsel's Closing Submission which considered whether other steps might be taken to mitigate the risks associated with the use of environmental matrices. Paragraphs 3 to 5 of NSS's draft Closing Submission explain that since the last set of hearings in relation to RHCYP/DCN, NHS Scotland Assure has developed an outline environmental matrix template that can be populated and adopted by project teams to define the environmental parameters relevant to their specific project. Paragraph 5 of NSS's draft Closing Statement explains:

*“Users of the matrix (typically the Health Boards, their technical advisers or designers) should populate the data fields based on Scottish Healthcare Technical Memorandum guidance as well as other applicable guidance and standards with reference to the patient cohort and/or facility requirements. The environmental matrix should be developed and completed in collaboration with all relevant stakeholders, including but not limited to, designers, clinical teams, infection prevention and control team, and estates delegates.”*

4.8 This updated document and guidance from NSS serves to highlight that the preparation of an environmental matrix (which can be a useful briefing tool) requires to (i) take into account all relevant SHTM guidance and such other applicable guidance and standards and (ii) should be developed in collaboration with many different parties, namely designers, clinical teams, infection and prevention and control. It is not something that, for example, a bidding party can reasonably be expected to prepare on behalf of a client in isolation of all of that necessary engagement. This is directly relevant to the points made later in this Closing Submission.

## 5. **THE REFERENCE DESIGN**

5.1 Paragraph 124 of Counsel's Closing Submission refers to the “Approach to Reference Design” paper produced by MML. This identified that the perceived benefits of using a reference design were: (1) a reduction in the timescale for the procurement exercise, (2) a reduction in clinical user consultation, and (3) greater certainty as to the final solution.

5.2 The draft “Advisory Paper 02: Reference Design Development” dated February 2011 (2023 Bundle 2, page 15) stated that for the NPD procurement process, a Reference Design was required to be developed on behalf of NHSL. Recognising that the work done to date (on the capital funded project) could not be used in its current state for the Reference Design, further development of the design was required. It was envisaged at that stage that this further development would be carried out in conjunction with the user groups to get their sign off of the revised design. The Suggested Reference Design Deliverables in Appendix B to that draft document indicated that room data sheets were to be produced by NHSL.

5.3 The “Approach to Reference Design” paper dated May 2012 (2023 Bundle 2, page 605) stated that the specific room requirements (defined as the “Room Information”) would be detailed in a combination of documents including the Environmental Matrix. That paper identified that the Environmental Matrix specifies the parameters and criteria that needed to be met and for which bidders will be required to advise the levels that will be achieved in their particular design (page 626). The paper also stated that in NPD projects with a Reference Design there is a requirement for a complete set of Room Information to be available to bidders. The Matrix of Reference Design Deliverables at Appendix B to that paper identifies the preparation of Room Data Sheets for all rooms



and space types with a tick against the “Deliverable Use Categories” identified as “Mandate and Fix Operational Functionality” and “OBC Costings”.

- 5.4 The Contract Control Order No 290961/02 (2023 Bundle 2, page 174) identified in the Agreed Deliverables for Reference Design that Room Data Sheets were a mandatory deliverable. Capita was noted as the lead for this deliverable (which is understood to be a reference to Tribal as Healthcare Planners who subsequently became Capita). NHSL subsequently dispensed with the services of an external Healthcare Planner (2023 Bundle 2, page 611). MML comment that the absence of an external healthcare planner could be perceived as a risk but this risk was deemed minor given previous healthcare planning input and NHSL’s in-house resource.
- 5.5 The involvement of the different parties engaged at various stages by NHSL to prepare Room Data Sheets was addressed in David Stillie’s evidence to the Inquiry. Mr Stillie told the Inquiry that NHSL had planned to produce a set of room data sheets to be provided to the bidders which he understood were being used as a briefing tool (Transcript, page 8). Mr Stillie explained that NHSL had originally engaged Tribal (Healthcare Planners) to produce Room Data Sheets, then NHSL had engaged Nightingales (architects) and then had subsequently engaged Hiltron (Transcript, paragraph 16). Hiltron had produced a project bespoke system for producing Room Data Sheets. Mr Stillie’s understanding was that the reason for not proceeding with Hiltron was because NHSL did not wish to incur the subscription fee payable to Hiltron for using their software (Transcript, page 16). Mr Stillie’s understanding was that the various sources of room information (which included the Environmental Matrix) were to take the place of briefing using the room data sheet because much of the room data sheet information was contained within the suite of documents. Mr Stillie thought that the Environmental Matrix was to replace the environmental page within the room data sheet (Transcript, page 18).
- 5.6 Paragraph 126 of Counsel’s Closing Submission refers to NHSL’s position that the Environmental Matrix was not to be relied upon so it cannot be taken as a brief. In those circumstances, Counsel notes, it is not clear that by conclusion of the Project Agreement NHSL had provided an *adequate* briefing of their requirements for environmental parameters. However, in the absence of Room Data Sheets, if the Environmental Matrix was not to be taken as a brief then it is not clear that NHSL had provided *any* briefing of their requirements for environmental parameters. NHSL has confirmed its position in its draft Closing Statement. This is that the BCRs themselves provided the brief and that specifying compliance with SHTMs was itself a sufficient alternative to the use of ADB for the purposes of compliance with CEL 19 (2010). Reference is made to the more detailed comments at section 9 (below) of this Closing Submission.
- 5.7 Mr O’Donnell’s evidence was that the Environmental Matrix was at least equivalent in value to Room Data Sheets produced by the ADB system but, as stated in Counsel’s Closing Submission in

paragraph 126, the significance of that evidence may be reduced if NHSL did not intend the Environmental Matrix to be taken as a brief.

5.8 Paragraph 128 of Counsel's Closing Submission refers to the perception that the reference design would reduce the need for consultation with clinicians but it would only do so to the extent that bidders were entitled to rely on the reference design as a statement of NHLS's requirements. To the extent that the reference design, or parts of it, were supplied for information only, it would be unrealistic to expect any reduction in the time needed for engagement between clinicians and designers. The "Approach to the Reference Design" paper prepared by MML stated that the reference design was to be developed with the user groups. Mr McKechnie described the limited engagement with clinicians during the procurement phase to be unusual. Mr O'Donnell explained that an Environmental Matrix needs to be discussed with NHSL as ultimate user of the hospital to ensure intended room functions are properly understood and that appropriate environmental parameters are chosen to meet those intentions (Transcript, page 21).

## 6. **ERRORS IN THE ENVIRONMENTAL MATRIX**

6.1 Paragraph 151 of Counsel's Closing Submission refers to Mr McKechnie's evidence that Wallace Whittle was asked, and agreed with misgivings, to take on the Environmental Matrix as a Wallace Whittle document. Graeme Greer's position was that there was a "transfer of ownership" of the Environmental Matrix in the Preferred Bidder phase. Mr Greer points to the request from the bidding consortium for an Excel copy of the Hulley & Kirkwood matrix, that Wallace Whittle "made changes to the matrix to suit the requirements" and the removal of the Hulley & Kirkwood logo from the document (Transcript, page 29).

6.2 Mr Greer explained that the Environmental Matrix sat in Appendix C in the Board's Construction Requirements (Transcript, page 29) – contained in Volume 3 in both the Invitation to Participate in Dialogue ("ITPD") documents and in the Invitation to Submit Final Tender ("ISFT") documents. Mr Cantlay told the Inquiry that Volume 3 is effectively what is envisaged to form the Board's Construction Requirements in the final contract, subject to being amended to reflect the development of the process and the final negotiation of the contract terms with the preferred bidder (Transcript, page 11). This suggests that the Environmental Matrix was intended to form Appendix C of the Board's Construction Requirements in the final contract. It is not clear, therefore, what basis NHSL purportedly had for "transferring ownership" of a document intended to form part of the Board's Construction Requirements in the final contract to IHSL.

6.3 Mr Greer explains that the Environmental Matrix was moved to Schedule Part 6, section 6 (which was the section covering room data sheets) for the final contract. This appears contrary to the earlier intention that the Environmental Matrix would slot in as Appendix C to the Board's Construction Requirements. Counsel notes at paragraph 257 of Counsel's Closing Submission that the

Environmental Matrix was treated in the reviewable design data schedule as if it were one of Project Co's Proposals but yet the Environmental Matrix was not itself formally part of those proposals: it is not included in the part of the Project Agreement schedules in which those proposals are set out. Furthermore, the Board's Construction Requirements are drafted on the basis that compliance with the Environmental Matrix forms part of those requirements.

- 6.4 Paragraph 154 of Counsel's Closing Submission refers to the queries raised by NHSL on the Environmental Matrix which included noting apparent discrepancies between the Environmental Matrix and SHTM guidance. One of those queries referred to the Environmental Matrix's requirement of 4 ac/hr in bedrooms, compared to the SHTM requirement of 6 ac/hr. Mr O'Donnell stated in his evidence that this was a deliberate choice when Hulley & Kirkwood was preparing the Environmental Matrix which Mr O'Donnell considered to comply with the overall guidance, which permitted natural ventilation for general ward areas (Transcript, page 70). Mr McKechnie explained that he was surprised to receive NHSL's comments on what he considered were their own briefing documents (Transcript, page 112). Later, Wallace Whittle prepared an air movement report (2023, Bundle 8, page 66) the purpose of which Mr McKechnie explained was to "*play back to the client group what they had briefed they wanted the ventilation figures to be*". In raising certain issues regarding the Environmental Matrix's compliance with SHTM recommendations, NHSL does not appear to have revisited the statement of compliance which it received from the reference design team (2023, Bundle 4, page 324).
- 6.5 The final bullet point of paragraph 163 of Counsel's Closing Submission refers to the Clinical Output Specification (2023, Bundle 5, page 376) and, in particular, to the section headed up "*Environmental and Services Requirements*" (page 388). Counsel refers, in particular, to two bullet points under the heading "*Environmental and Services Requirements*" which state: "*Flexibility in the use of Critical Care beds for both High Dependency and Intensive Care is key to maintaining efficient use of high specification beds. All three Critical Care Areas must be co-located*"; and "*All PICU and HDU bed spaces are required to be of the same specification to allow greatest flexibility of use.*" Counsel notes that the Chair may wish to consider whether those latter references might be taken to indicate a requirement for a ventilation specification at the highest level appropriate for non-isolation rooms in critical care. Mr McKechnie's evidence was that he did not see the relevance of the PICU and HDU bed spaces as an engineering term and that his interpretation would have been that its more to do with the layouts and possibly the fittings – the general fittings and fitments within the rooms themselves (Transcript, pages 44 and 45).
- 6.6 Closer examination of the list of bullet points under "*Environmental and Services Requirements*" give an indication of the types of matters with which it was concerned. The list of bullet points includes, for example:

- 6.6.1 The floor covering provided needs to be impervious, easily cleaned, durable and allow easy movement of equipment (e.g., beds, trolleys);
- 6.6.2 Facilities will need to comply with Disability Discrimination Act legislation;
- 6.6.3 Patient rooms should have natural daylight but ensure privacy;
- 6.6.4 Specific areas must have ceiling hoists;
- 6.6.5 Layout of the department should be clear and logical to enable easy way of finding, orientation and access to facilities for displaying information for patients and members of the public who may be disabled, hard of hearing or partially sighted. Signage must be clear;
- 6.6.6 Chairs with arms in a variety of seat heights must be available to be suitable for infant to young people and their families;
- 6.6.7 Walls and furnishings should be soft and warm in colour.

6.7 Mr McKechnie in his evidence stated that in this context the reference to the spaces being of the same specification to allow greatest flexibility of use was concerned with the layouts and the actual furniture and not to mechanical and electrical engineering matters (Transcript, page 46) an interpretation which is borne out by the types of issues listed above.

## 7. THE PROCUREMENT EXERCISE

7.1 At paragraph 166 of Counsel's Closing Submission Counsel invites the Chair to find that there was ambiguity, and inconsistency, in the procurement documents provided to tenderers which contributed to problems with the Project. Given the evidence that the Inquiry heard from the witnesses and the substantially different positions advanced by NHSL and MML on the one hand and IHSL, Multiplex and Wallace Whittle on the other, that is a reasonable summary of the position.

7.2 Ian Graham, when explaining to the Inquiry his subjective understanding of what some of the provisions of the procurement documents meant, identified apparently significant drafting errors in the procurement documents (Transcript, page 33).

7.3 Paragraph 184 of Counsel's Closing Submission refers to Volume 1, paragraph 2.6 of the ITPD documents which states that "*other information has been generated both as a by-product of preparing the Reference Design itself and as a general Project requirement*". This included: "*Building services engineering solutions.*" Paragraph 2.6 of Volume 1 appears to stem from MML's "Approach to Reference Design" paper dated May 2012 (2023 Bundle 2, page 605) which provides at section 4.2 that certain elements will be developed as a consequence of the Reference Design being prepared. One of those elements was Building Services engineering solutions.

- 7.4 In contrast, section 4.3 of the “Approach to Reference Design” paper addresses the “Room Information”. Section 4.3 states that specific room requirements will be detailed in a combination of documents which included the Environmental Matrix. Section 4.3 is translated into section 2.5.3 of Volume 1 of the ITPD and ISFT documents which provides that the specific room requirements are detailed in a combination of documents including the Environmental Matrix.
- 7.5 On the basis that section 2.5.3 of the ITPD documents specifically identifies that the specific room requirements are detailed in the combination of documents including the Environmental Matrix, it is not clear why it might be considered that the Environmental Matrix was a “by-product” of the reference design. David Stillie’s evidence addressed his e-mail dated 15 August 2012 in which he confirmed that Hiltron had been informed that they should do no further work on the room data sheets and that there was an agreed way forward that will complete the room information documents (Transcript, page 17). All the room information which NHSL wished to pass on to bidders would be included in a combination of documents which included the Environmental Matrix. Mr Stillie’s understanding of NHSL’s purpose in providing that information to bidders was to take the place of using the room data sheets because much of the room data sheet information was contained within that suite of documents (Transcript, page 17).
- 7.6 Paragraph 196 of Counsel’s Closing Submission states that given that CEL 19 (2010) required ADB to be used as a design and briefing tool, it is not clear how a *tenderer* could comply with this requirement without using ADB (or an equivalent which they had demonstrated to be equal in quality and value) to produce ventilation requirements. Doing so, Counsel notes, could have potentially have flagged the problems with critical care rooms in the Environmental Matrix. The Inquiry heard that the IHSL bidding consortium (namely the architects) did use ADB to prepare Room Data Sheets. Section 2.5.3 of Volume 1 of the ITPD documents stated that during dialogue bidders were required to develop Room Data Sheets incorporating the Room Information (which included the Environmental Matrix). Liane Edwards in her evidence described the preparation of the room data sheets which involved extracting the data from the Environmental Matrix into the room data sheets. Given the obligation in Section 2.5.3 an error in the Environmental Matrix was inevitably going to be incorporated into the room data sheets as they were tailored. The use of the ADB would not have flagged the error in the Board’s Environmental Matrix because the bidders and then the Preferred Bidder was required to revise the ADB generated Room Data Sheets with the project specific room requirements as set out in the Board’s Environmental Matrix.
- 7.7 Paragraph 198 of Counsel’s Closing Submission addresses the provision at paragraph 2.3 of Volume 3 of the ITPD documents. Paragraph 2.3 states that “*unless the Board has expressed elsewhere in the Board’s Construction Requirements, a specific and different requirement, the Facilities shall comply with but not be limited to the provision of the NHS Requirements....*” The Environmental Matrix was included as Appendix C to the Board’s Construction Requirements thus bringing it into the ambit of this provision. Ian Graham’s evidence was that NHSL’s expectation would be that there

were perhaps higher standards than SHTMs or HTMs rather than a diminution in specification. NHSL apparently had not realised the effect of that drafting meant that compliance with the guidance gave way to a specific requirement set out in the Board's Construction Requirements whether or not the different requirement was a higher standard or lower standard than that contained in the guidance.

7.8 Counsel refers at paragraph 206 of Counsel's Closing Submission to paragraph 2.5 of Volume 1 of the ITPD and ISFT documents (and which is repeated in the Board's Construction Requirements in the Project Agreement) which contains a 'Hierarchy of Standards' provision. IHSL notes Counsel's recognition that there are competing views regarding the interpretation of this provision. When read in its context, paragraph 2.5 is concerned with any contradictions in the "*standards/advice*" apparent within the terms of the Board's Construction Requirements. This appears to refer to contradictory standards and advice which may be apparent from the publications referred to in the preceding paragraphs (e.g., the raft of NHS standards referred to in paragraphs 2.3 and 2.4) and not to any conflicts between published guidance and a specific requirement laid down by the Board. The hierarchy of standards clause is not stated as a rule of interpretation when considering the ITPD documents or the Project Agreement. It has no relevance, for example, when considering inconsistencies within a contract document (such as, for example, the contradiction between the Guidance Notes and the critical care department sheets within the Environmental Matrix) or between specific contract documents. In any event, the relevant provisions of the Project Agreement state that the guidance in HTMs/STHMs gives way to any specific requirement of the Board. Where the Board's requirements include a specific parameter for a specific room which differs from generalised guidance it is not obvious that this falls to be construed as a 'conflict': a more natural interpretation would be that the Board has specified a departure from the generalised guidance. That is certainly an interpretation that is consistent with the provisions of the Project Agreement.

7.9 Counsel identifies at paragraph 215 of Counsel's Closing Submission that a tenderer would still have to grapple with the disconnect between the Guidance Notes section of the Environmental Matrix (which contained the intended specification for critical care rooms) and the parameters specified in the critical care department sheet. The Environmental Matrix itself stated at the top of the Room Function Reference Sheet: "*Refer to individual department sheets for individual room environmental conditions*". Notwithstanding that, there was a divergence of opinion between the witnesses. William Stevenson's view was that the guidance notes on the front would take precedence (Transcript, page 19) whereas Mr O'Donnell's view was that the more onerous standard would take precedence (Transcript, page 88).

## 8. **RECOMMENDATIONS**

8.1 IHSL notes Counsel's comments at paragraph 322 of Counsel's Closing Submission that the Chair is not invited to make any recommendations at this stage. IHSL concurs with Counsel's suggestion that at the conclusion of the evidence that Chair may wish to circulate a paper to interested parties

setting out potential options to seek to address any problems identified by the Chair and for discussion with stakeholders before any formal recommendations are made.

## 9. COMMENTS ON NHSL'S DRAFT CLOSING SUBMISSION

9.1 It was noted earlier in this Closing Submission that IHSL did not intend to set out its legal interpretation of the ITPD documents and Project Agreement but to confine its focus to the factual evidence. In light of the comments made by NHSL in its draft Closing Submission, however, IHSL considers it necessary to respond to those comments in this Closing Submission.

9.2 NHSL seeks to invite the Inquiry to reach different conclusions to those identified in Counsel's Closing Submission. However, it is submitted that NHSL's view that the tender documents and Project Agreement were "clear" in setting out its contended interpretation is misplaced. NHSL states its position at paragraph 27 of its draft Closing Submission that, "*when read in context and in the round, the procurement and contractual documentation could not sensibly or realistically be seen as being ambiguous in the way that is suggested in the CTI Submission.*" This view is surprising given the evidence heard at the second session in April and May 2023 and given the terms of the ITPD, ISFT and Project Agreement.

9.3 In addressing NHSL's comments, IHSL adopts the headings used by NHSL in its draft Closing Submission.

### 4. Procurement and Contractual Documentation

#### *The primacy of guidance in the Board's Construction Requirements*

9.4 NHSL states at paragraph 29 of its draft Closing Submission that "*the essence of the Board's Construction Requirements (the "BCRs") was that NHSL required the new Hospital to comply with best practice and all relevant guidance, including SHTM 03-01.*" NHSL relies upon section 2.3 of the BCRs for that position and quotes from paragraph v. of Section 2.3. However, NHSL has failed to acknowledge the opening words of Section 2.3 which state:

*"In addition to the standards listed in paragraph 2.4 of this Sub-Section C, **unless the Board has expressed elsewhere in the Board's Construction Requirements a specific and different requirement**, the Facilities shall comply with but not be limited the provisions of the NHS Requirements as the same may be amended from time to time..."*

9.5 Paragraph (h) of Section 2.3 then refers to HTMs and SHTMs, and paragraph v. sets out the position with regards to HTMs and SHTMs in further detail. NHSL's contention that Section 2.3 gives primacy to the guidance is not borne out by the terms of that section. Section 2.3 does not afford primacy to the guidance. On the contrary, Section 2.3 clearly states that the guidance gives way to the Board's

express requirements as set out in the Board's Construction Requirements. It is the Board's Construction Requirements that take primacy.

- 9.6 This position was also reflected in clause 5.2.3 of the Project Agreement which provides that the Project Operations are to be performed “**except to the extent expressly stated to the contrary in the Board's Construction Requirements or the Service Level Specification**, in compliance with all applicable NHS Requirements”.
- 9.7 NHSL also seeks to draw support from Section 2.5 which contains the Hierarchy of Standards provision. When read in its context, section 2.5 is concerned with any contradictions in the “standards/advice” apparent within the terms of the Board's Construction Requirements. This refers to contradictory standards and advice which may be apparent from the publications referred to in the preceding paragraphs (e.g., the raft of NHS standards referred to in paragraphs 2.3 and 2.4) and not to any conflicts between published guidance and a specific requirement laid down by the Board. This provision is addressed further in paragraph 7.8 of this Closing Submission. Section 2.5 offers no support that the guidance takes primacy over any other part of the Project Agreement or the bid documents.

*Alleged ambiguity*

- 9.8 NHSL addresses the “alleged ambiguity” identified in Counsel's Closing Submission at paragraphs 36 to 41 of its draft Closing Submission.
- 9.9 NHSL does not address Section 2.5.3 of Volume 1 of the ITPD documents in its analysis in any significant way (paragraph 39 of the draft Closing Submission). That omission is telling. Section 2.5.3 appears to NHSL to be the most obvious starting point in any analysis of how the procurement documents addressed the Environmental Matrix. It will be recalled that Mr Cantlay explained that Volume 1 of ITPD was a procurement document which explained the procurement process to the bidders (e.g., what bidders are required to do in terms of submitting a bid, arrangements during the bid period, how bids will be evaluated etc.) and became redundant at Financial Close.
- 9.10 Section 2.5.3 of Volume gives the clearest explanation of the purpose of the Environmental Matrix and its status. Section 2.5.3 states that standard format Room Data Sheets have not been prepared by NHSL for the Project. Rather, “*the specific room requirements (the “Room Information”) are detailed in a combination of the following documents: the Board's Construction Requirements; the Environmental Matrix; ....*” Section 2.5.3 states in terms that the Board's specific room requirements are contained in *inter alia* the Environmental Matrix. Giving the words their natural and ordinary meaning, the specific room requirements set out what NHSL wanted and what it expected bidders to provide. In other words, its brief. This is consistent with Mr Stillie's evidence. Mr Stillie's understanding was that the various sources of room information (which included the Environmental Matrix) were to take the place of briefing using the room data sheet because much of the room data



sheet information was contained within the suite of documents. Mr Stillie thought that the Environmental Matrix was to replace the environmental page within the room data sheet (Transcript, page 18).

- 9.11 The “*Approach to Reference Design*” paper produced by MML dated 28 August 2012 (Bundle 2, page 605) Revision J states as follows:

*“The Room Information provided to bidders is generally a mix of specific and generic information for instance architectural requirements are specified in terms of compliance with particular NHS Guidance such as Health Technical Memorandum with Bidders ultimately being required to specify compliant material/components. **Similarly, the Environmental Matrix specifies parameters and criteria which need to be met and for which bidders will be required to advise the levels that will be achieved in their particular design.....**”*

- 9.12 MML addresses this Revision J document at paragraph 30 of its draft Closing Submission stating that:

*“During the period leading up to the procurement exercise, internal consideration was given by NHSL and MML to the reference design being mandatory for bidders. This is evidenced by Revision J of the “Approach to Reference Design” papers... However, the “Approach to Reference Design” paper was an internal document that was not issued to bidders. There were a number of iterations of the document, reflecting the evolution of the plan for the procurement process. Making the EM mandatory for bidders was not the final position, nor was it the position that was communicated to bidders. That position is to be found in the ITPD documentation itself”.*

- 9.13 IHSL agrees that the position is to be found in the ITPD documentation itself. However, far from indicating the NHSL and MML had departed from the position set out in Revision J of the MML paper, Section 2.5.3, by stating that the Environmental Matrix sets out the Board’s specific room requirements, is consistent with the purported earlier intention set out in that paper. If it was NHSL’s intention that the Environmental Matrix was only ever an indicative document for bidders to use or ignore as they chose, why, it must be asked, (i) was it described as setting out the Board’s specific room requirements and (ii) were bidders obliged to incorporate it into their Room Data Sheets? If it had been NHSL’s intention that the Environmental Matrix was not to be complied with then something clearly has gone wrong with the drafting of the Volume 1 ITPD documents.

- 9.14 For reasons it doesn’t fully explain, NHSL considers that the “key part” of Section 2.5.3 is the second last sentence which states that “*the Room Data Sheets will form part of the Bidder’s proposals*”. It appears that NHSL seeks to draw upon this reference to Room Data Sheets forming “Bidder’s proposals” through the dialogue phase in Volume 1 of the ITPD documents (which on NHSL’s own

position is redundant at Financial Close) to suggest that the Environmental Matrix must have formed part of Project Co's Proposals in the Project Agreement because it sat alongside the Room Data Sheets in Schedule 6 of Schedule Part 6. In attempting to draw this connection, NHSL has ignored the relevant provisions of the Project Agreement which describes Project Co's Proposals as being those contained in the documents at Section 4 of Schedule Part 6. In contrast, the Room Data Sheets and the Environmental Matrix were contained in Section 6 of Schedule 6 (*Room Data Sheets*).

- 9.15 In any event, it is submitted that the "key part" of Section 2.5.3 is in fact the opening sentence which tells bidders that that Board's specific room requirements are set out in the Environmental Matrix. Nevertheless, in addressing what it considers to be the "key part", NHSL has failed to identify that, whilst Room Data Sheets will form part of the Bidder's proposals, during Dialogue the bidders were required to develop Room Data Sheets incorporating the Room Information. The bidders were therefore obliged to incorporate the specific requirements of the Environmental Matrix into their Room Data Sheets (a process which the Inquiry heard described as "tailoring"). The bidders embarked from the outset on a process of incorporating the Environmental Matrix into its Room Data Sheets. That explains why the IHSL bidding consortium produced Room Data Sheets which reflected the contents of the Environmental Matrix. IHSL was obliged by Section 2.5.3 to do so. That also addresses NHSL's comment at paragraph 57 of its draft Closing Submission that IHSL produced Room Data Sheets using the ADB and yet the Room Data Sheets were not in line with SHTM 03-01.
- 9.16 Volume 1 of the ITPD documents provides a specific definition of "Environmental Matrix". It means the matrix contained in ITPD Volume 3, Schedule Part 6, Section 3, Appendix C. This directed bidders to the Environmental Matrix prepared by Hulley & Kirkwood during the reference design phase and which NHSL issued to bidders with its Board's Construction Requirements in Volume 3.
- 9.17 NHSL seeks to explain the definitions of the Environmental Matrix used in Volumes 1 and 3 of the ITPD documents. There can be no ambiguity regarding the definition of "Environmental Matrix" in Volume 1. However, with regards to the definition in Volume 3, NHSL's position is that "*Volume 3 of the ITPD was a set of BCRs that were to be incorporated into the Project Agreement, subject to any necessary revisals. The **definition of "Environmental Matrix" in Volume 3 of the ITPD was therefore a placeholder** pending development by the successful bidder of its own Environmental Matrix.*"
- 9.18 The definition of "Environmental Matrix" in Volume 3 of the ITPD was:

*"the Environmental Matrix, **which details the room environmental condition requirements of the Board required within each department/unit/space/area.** The title is Reference Design Envisaged Solution – RHSC/DCN Environmental Matrix version third issue as set out in Appendix of this Section 3 (Board's Construction Requirements) of*

*Schedule Part 6 (Construction Matters) (as varied, amended or supplemented from time to time in accordance with the Project Agreement.)*

- 9.19 NHSL suggests that this definition was merely a “placeholder” for the purposes of Volume 3 of the ITPD pending development by the successful bidder of its own Environmental Matrix. If that was the case the wisdom of using such a definition as a “placeholder” must be called into question. The definition expressly states that the Environmental Matrix details the Board’s room environmental condition requirements. If, in fact, it did not, then such an approach adopted by NHSL and/or MML could be described at best as perilous and ill-advised. It is illogical for NHSL to present Volume 3 in its ITPD documents issued to bidders and invite bidders to read the definition of “Environmental Matrix” in the way contended for by NHSL.
- 9.20 In any event, if Volume 3 was a set of BCRs that were to be incorporated into the Project Agreement, the Environmental Matrix was contained in Appendix C of Section 3 of Schedule 6 (*Board’s Construction Requirements*). The bidders were therefore entitled to expect the Environmental Matrix (whether updated or not) to remain as Appendix C to the Board’s Construction Requirements. There is nothing in either Volumes 1 or 3 to convey to bidders that the Environmental Matrix was to be developed by them into what would become Project Co Proposals.
- 9.21 If the Environmental Matrix detailed the room environmental condition requirements of the Board it is far from clear why bidders would be expected to take on responsibility for those requirements or why they would be expected to know the mind of the Board to determine what its requirements may or may not be.
- 9.22 NHSL also suggests that this development of the Environmental Matrix was in accordance with submission requirements C8.2(x) and C8.3 included in Appendix A(ii) to Volume 1 of the ITPD which set out the requirement for the tenderers to produce their own Environmental Matrix as part of the tender exercise. The bid submission C8.3 is significant here. It stated:
- “Whilst bidders are required to undertake their own design, the Board has provided a draft Environmental Matrix as part of the ITPD documentation. **Bidders must confirm acceptance of the Board’s Environmental Matrix**, highlighting any proposed changes on an exception basis.”*
- 9.23 Contrary to the position set out by NHSL, bidders were required to comply with the Environmental Matrix but could *propose* changes on an exception basis.
- 9.24 In any event, the definition of “Environmental Matrix” in Section 3 of Schedule 6 to the Project Agreement (Board’s Construction Requirements) is similar to the definition contained in Volume 3 of the ITPD and ISFT documents, the key difference being the location within Schedule 6 where the

Environmental Matrix was housed. The definition of “Environmental Matrix” in Section 3 of Schedule 6 in the Project Agreement is as follows:

*“means the Environmental Matrix **which details the room environmental condition requirements of the Board required** within each department/unit/space/area as set out in Section 6 (Room Data Sheets) of Schedule Part 6 (Construction Matters) (as varied, amended or supplemented from time to time in accordance with the Project Agreement.”*

9.25 Quite why NHSL and IHSL would describe the Environmental Matrix as detailing the Board’s room environmental condition requirements if it was in fact a Project Co’s design proposal remains unexplained by NHSL.

*The submitted tenders*

9.26 NHSL contends that if there was a lack of clarity in the procurement documents that is precisely what the procurement process was there to address. Furthermore, there was no evidence during the procurement process that any of the tenderers flagged up any of the issues that are now being identified as possible areas of ambiguity in Counsel’s Closing Submission.

9.27 The simple response here is that the evidence heard at the April/May 2023 hearing from the MPX and Wallace Whittle witnesses was that they had thought they’d clearly understood the position. It turns out, however, that what they understood is quite the opposite to the position contended for by MML and NHSL. In light of that, for NHSL to insist that its interpretation is “clear” and to reject the ambiguities and inconsistencies identified in Counsel’s Closing Submission would appear an untenable position.

9.28 What is clear is that Bidder C had identified a proposed change in its marked-up Environmental Matrix with its tender submission. This proposed change increased the 4 ac/hr in critical care rooms to 10 ac/hr. On the basis that bidders were required to confirm acceptance of the Board’s Environmental Matrix and only propose changes on an exception basis, Bidder C’s proposed change ought to have been readily identifiable. It is not clear why Bidder C made the change, but it had, intentionally or otherwise, identified the error contained in the Board’s Environmental Matrix but NHSL’s team reviewing the tenders did not spot it.

*Status of the Environmental Matrix*

9.29 NHSL suggest that the Board’s Environmental Matrix was “Disclosed Data” for the purposes of the Project Agreement.

9.30 This position makes little sense either against the factual background or against the provisions of the ITPD and ISFT documents which governed the bid and then Preferred Bidder process.

- 9.31 As noted above, the Board's Environmental Matrix was issued as one element of the suite of documents defined as the "Room Information". This set out the Board's specific room requirements. Bidders were required to incorporate the Room Information to the Room Data Sheets thus embarking from the outset on a design that met those requirements.
- 9.32 The bid submission requirements require bidders to confirm acceptance of the Board's Construction Requirements allowing proposed changes to be made on an exception basis. Throughout the competitive dialogue and the Preferred Bidder process the Board's Environmental Matrix was the "Environmental Matrix". The Preferred Bidder had 'baked' the Environmental Matrix into its design as it was obliged to do.
- 9.33 Volume 3 of the ITPD and ISFT demonstrated to the bidders that the Board's Environmental Matrix would be found in Appendix C to the Board's Construction Requirements. There was never any indication (contrary to NHSL's contention) that the Environmental Matrix to be incorporated into the Project Agreement was to be the tenderer's own document incorporated into the Project Agreement as part of the tenderer's Project Co's Proposals.
- 9.34 The IHSL bidding consortium did not propose changes to the Board's Environmental Matrix in its tender submission. The Board's Environmental Matrix remained unchanged in IHSL's bid submission up to Preferred Bidder stage. It was not until the period between the award of Preferred Bidder status and Financial Close when the Board made comments on its own Environmental Matrix that certain issues were identified. Those seven items in the Environmental Matrix remained unresolved prior to Financial Close so that the Environmental Matrix (or more accurately those specific unresolved issues) became Reviewable Design Data (Bundle 5, page 880). Consequently, the Environmental Matrix was housed in Section 6 of Schedule Part 6 along with the Room Data Sheets. This was an outcome that was never apparently envisaged by Volume 3 of either the ITPD or ISFT – both of those demonstrated to bidders that the Environmental Matrix would be contained in Appendix C to the Board's Construction Requirements.
- 9.35 The status of the Environmental Matrix under the Project Agreement is unclear. Contrary to NSHL's position, the Environmental Matrix is not contained in the Project Co's Proposals at Section 4 of Schedule Part 6. Neither is it contained in Appendix C of Section 3 (Board's Construction Requirements) where parties would hitherto have expected it to be found. Instead, the Environmental Matrix was found in Section 6 of Schedule Part 6 alongside the Room Data Sheets. And yet, the Board's Construction Requirements in Section 3 still defined the Environmental Matrix as setting out the Board's room environmental condition requirements. This contradicts NHSL's position that the Environmental Matrix had somehow become part of Project Co's Proposals. Furthermore, section 8 of the Board's Construction Requirements in Section 3 required Project Co to comply with the Environmental Matrix. This is a curious provision to be found in the Board's Construction

Requirements if indeed the Environmental Matrix was part of Project Co's Proposals as NHSL contend.

9.36 NHSL suggest (at paragraph 50) that the "key piece of evidence" surrounding the status of the Environmental Matrix was the fact that on 3 July 2014, MPX on behalf of Wallace Whittle asked for and received an Excel copy of the Board's Environmental Matrix and thereafter made changes. For NHSL to attach such significance to this request for an Excel copy is surprising. The ITPD and ISFT documents did not indicate that the Preferred Bidder would be taking responsibility for the Environmental Matrix (it will be recalled that Volume 3 envisaged that the Environmental Matrix would form Appendix C to Section 3 of Schedule Part 3). A request for an Excel copy of the document does not in IHSL's submission demonstrate any fundamental transfer of risk for the Board's room environmental condition requirements (where such a transfer has not been accommodated in the bid documents or ultimately in the Project Agreement).

9.37 NHSL refer to the Board providing comments to IHSL "*on the IHSL Environmental Matrix.*" On the basis that the IHSL consortium had not changed the Board's Environmental Matrix it does not appear to have struck NHSL or MML as odd that NHSL were flagging issues of non-compliance of its own Environmental Matrix with SHTM guidance. At the very least it might be considered that it would have caused NHSL and/or MML to revisit the assurance provided by the reference design team that the reference design complied with SHTM guidance.

*Activity Data Base, Room Data Sheets and CEL 19 (2010)*

9.38 NHSL's comments at paragraphs 52 to 57 of its draft Closing Submission addressing the ADB, Room Data Sheets and CEL 19 (2010) are of considerable interest.

9.39 It appears that NHSL has conflated the issue of a client's brief (i.e. setting out its requirements that the contractor is required to meet) with the design itself. CEL 19 (2010) states that the ABD is the appropriate tool for briefing, design and commissioning or an alternative of equivalent value may be adopted.

9.40 Some of the witnesses were asked if they considered the Environmental Matrix to be a briefing tool having an equivalent value to ADB generated Room Data Sheets. NHSL, however, confirm that in the case of the RHCYP/DCN, the Board's Construction Requirements were the brief. Indeed, "*the BCRs specified inter alia the guidance that was set to be followed for environmental parameters... SHTM 03-01 defined the parameters*" (paragraph 53).

9.41 The contradiction at the heart of this position is that NHSL issued the Environmental Matrix to the bidders as part of the Board's Construction Requirements – it formed Appendix C to the Board's Construction Requirements in Volume 3. On the one hand NHSL state that the BCRs were the brief

but on the other state that the Environmental Matrix (although forming part of the BCRs) was not part of the brief. It is difficult to see how this contradiction is to be resolved.

- 9.42 NHSL states (at paragraph 54) that: *“The short point is that, in the context of a design and build contract, specifying compliance with SHTM 03-01 is an alternative approach that is suitable to the contractual context.”* This statement is particularly surprising for two reasons: (i) in light of CEL 19 (2010) it cannot be said on any sensible view that the Board’s Construction Requirements themselves are a tool for briefing and design akin to the ADB); and (ii) the nature of SHTM 03-01 cannot on any view give definitive parameters for room environmental parameters.
- 9.43 It is not clear what NHSL has in mind when it says that SHTM 03-01 defined the parameters. It presumably means Table A1 in SHTM 03-01. In any event, NSHL appears to consider that SHTM 03-01 is the complete answer to conveying its requirements for environmental parameters.
- 9.44 The witness statement of Susan Grant is particularly significant and indeed helpful in this context. This is described in more detail at paragraphs 3.4 to 3.10 above. Ms Grant very helpfully explains that Table A1 provided users with an aid-memoire but it should not be considered as a sole source of data for briefing and design. Table A1 requires to be read in conjunction, not only with the whole of SHTM 03-01, but also with the rest of NHS Guidance relevant to each project. Ms Grant explained that NHS briefing and design is a whole process, with a series of documents that requires multi-disciplinary clinical and HBE experts to support it. The process needs to address the clinical function of the room, the risks, how outcomes will be met and the key components from a variety of guidance and ABD inputs that would allow the NHS to meet its overarching legal duty of care. Ms Grant stated that success is not a blind application of individual sections of NHS Guidance, as out of context an individual element could breach a legal duty of care.
- 9.45 In view of those comments, NHSL’s position that specifying compliance with SHTM 03-01 defined the parameters and was the equivalent of using ADB is extremely significant. If NHSL’s position is that it was for IHSL prepare its own Environmental Matrix with only SHTM guidance as a parameter, NHSL appears to have adopted the type of approach that HFS specifically warns against. NHSL appear to have expected to use SHTM 03-01 as an easy one-stop shop in precisely the way that HFS would warn against.
- 9.46 Not only does HFS warn against taking such an approach, the Inquiry also heard from other witnesses on the shortcomings of SHTM 03-01.
- 9.46.1 SHTM 03-01 is guidance. SHTM 03-01 contains a disclaimer near the beginning of each version stating that its contents are provided by way of general guidance at the time of its publication.

- 9.46.2 SHTM 03-01 is not fully comprehensive – it does not cover every type of room in a hospital facility.
- 9.46.3 SHTM 03-01 itself contains inconsistencies and ambiguities.
- 9.46.4 Its status as “best practice” has been called into question given that the standards are based on research some 50 years old (reference is made to the draft Closing Submission on behalf of NHS Greater Glasgow & Clyde).
- 9.46.5 The Project Agreement itself specifically provided for the BCRs to take precedence over the Guidance, such as SHTM 03-01.
- 9.46.6 SHTM 03-01 cannot be interpreted and applied in isolation of the needs of the patient cohort or input from clinicians and other stakeholders.
- 9.47 Mr Macrae’s evidence to the Inquiry was that the biggest problems with large NHS projects such as the RHCYP/DCN was that the guidance was open to interpretation, the table of rooms within STHM 03-01 was not comprehensive enough and doesn’t deal with the different clinical or patient needs.
- 9.48 It is the last point (above) that would strike NHSL’s position here as being inconceivable.
- 9.49 The project to design and construct a new Royal Hospital for Sick Children in Edinburgh was to be capital funded. A considerable amount of time and in particular time spent engaging with clinicians was spent preparing a design for the original project.
- 9.50 Mr O’Donnell in his evidence to the Inquiry explained the genesis of the Environmental Matrix prepared by Hulley & Kirkwood. In an e-mail from Mr O’Donnell to David Muir of BAM Construction dated 15 February 2010, Mr O’Donnell explained that rather than employing ADB Room Data Sheets Hulley & Kirkwood would produce an “Environmental Spreadsheet” for each room type for easy reference as a “*user sign off tool*”. By “*user sign off tool*” Mr O’Donnell explained that:
- “it recognises that the Environmental Matrix is something that needs to have discussion. Whilst we [i.e., Hulley & Kirkwood] take the lead in populating it, it needs to be shared with the client team to make sure that what we think is, for example, a treatment room and that the environmental data that goes with that room is the correct approach. So it goes to the point that it’s not always clear from briefing or from room layouts that are produced from briefing, that a particular room function is indeed that function or whether there’s been some interpretation of it and then if there is, it needs to be reviewed, discussed, clarified.*
- (Transcript, pages 21 and 22).
- 9.51 When asked by Counsel who Mr O’Donnell meant when he talked about the “user” and who is the user that would have to sign it off, Mr O’Donnell replied:



*“Ultimately, the client. It’s to try and get to a point where the client has gone through an engagement process and is satisfied that that’s an agreement **that those environmental approaches that are in the matrix do represent what they need.**”* (Transcript, page 22)

- 9.52 Following the decision to change the funding model to an NPD model, NHSL explained that a key consideration was the wish not to lose the work that had been done or to see that go to waste. NHSL with its advisers decided to adopt the use of a Reference Design. During the preparation of the Reference Design phase Hulley & Kirkwood developed an Environmental Matrix for the combined RHCYP/DCN project. This was prepared through discussion with NHSL.
- 9.53 The provisions in the ITPD and ISFT documents addressing the status of the Environmental Matrix are addressed above. In short, the “Room Information” was said to spell out NHSL’s specific room requirements – that included the Environmental Matrix.
- 9.54 Those provisions demonstrate that the ITPD documents proceeded on the basis that bidders should use the Board’s Environmental Matrix as the basis for their bids. As a result, NHSL was able to reduce the requirement for bidders to take up valuable clinician time, compress the procurement process and reduce costs.
- 9.55 If, as NHSL contend, the brief to bidders was simply to comply with SHTM 03-01 and they were to disregard the Environmental Matrix the bidders would in effect have to start from the beginning. Mr McKechnie stated in his evidence (Transcript, page 58) that if the Environmental Matrix was not to define the Board’s requirements, the IHSL bidding consortium was going into a contract with what he would consider to be a major portion of a client’s brief. When asked by Counsel what degree of work would be involved in putting together an Environmental Matrix if a designer was doing it from scratch, Mr MacKechnie spoke from experience and answered: *“From scratch, it’s a nightmare...”* (Transcript, page 58).
- 9.56 If bidders were not supposed to regard the Environmental Matrix as the Board’s requirements for their bids IHSL would have had to prepare its own version from scratch. This would clearly have required engagement with clinicians (which NHSL wished to avoid given the level of clinician engagement up to that point) and would have taken considerably longer to conduct the competitive dialogue phase (which the use of the Reference Design was intended to compress).
- 9.57 If NHSL’s contention that it was for bidders to develop their own Environmental Matrix is accepted, the bidders would have been unable to develop an Environmental Matrix of their own in the time available for the purposes of their bids. The bidders would also have faced a significant challenge given the submission requirement C8.3 which required bidders to confirm acceptance of the Board’s Environmental Matrix – they’d have fallen foul of that requirement had they submitted their own. Reference is made to the bid reviewer’s comment on IHSL’s bid where they stated that no changes were being proposed to the Board’s Environmental Matrix: *“Good response”*.

9.58 In summary, it is entirely illogical for NHSL to contend that the BCRs served as an alternative briefing tool or indeed that specifying compliance with SHTM 03-01 itself was the alternative briefing tool to the use of ADB as required by CEL 19 (2010). If that was the case, and bidders were free to disregard the Environmental Matrix not only would this have prolonged and increased the costs of the procurement process but also it would have required the bidders to engage in extensive client and clinical consultation in order to develop a brief that met their requirements.

#### *Clinical Engagement*

9.59 NHSL explains the clinical engagement that did take place in paragraphs 58 to 69 of its draft Closing Submission and in NHSL's 'Chronological Table of Clinical Input into the Design' (Bundle 12, pages 104-109). In that Chronological Table NHSL note that "*extensive engagement between the clinicians, the Project Team (including NHS Lothian Capital Planning and Project Managers) and the reference design team did take place.*" It further states: "*The clinicians did not review the detailed m&e technical documents like the Environmental Matrix (EM) in relation to ventilation requirements such as air changes per hour. NHS Lothian appointed Technical Advisers, MML, to manage the specialist m&e aspects of the project.*"

9.60 It is noteworthy that clinicians did not review the Environmental Matrix prepared by Hulley & Kirkwood through the reference design phase. In Mr O'Donnell's evidence, however, that clinician and client input is required in order to ensure that the Environmental Matrix reflects what the client needs.

9.61 This perhaps brings us up to the present-day position as set out in the draft Closing Submission from National Services Scotland concerning the use of an environmental matrix. This states that users of the matrix (typically the Health Boards, their technical advisers or designers) should populate the data fields based on SHTM guidance as well as other applicable guidance and standards with reference to the patient cohort and/or facility requirements. The environmental matrix should be developed and completed in collaboration with all relevant stakeholders, including but not limited to, designers, clinical teams, infection prevention and control team, and estates delegates.

9.62 If it was the case that the Environmental Matrix was not mandatory for bidders to follow, bidders would have needed to develop their own environmental matrix in collaboration with all relevant stakeholders, including clinicians etc. to ensure that what was designed met NHSL's needs. This clearly was the position that NHSL wished to avoid by using the reference design – thereby allowing them to reduce the length and cost of the procurement exercise.

#### 10. **COMMENTS ON MML'S DRAFT CLOSING STATEMENT**

10.1 MML's draft Closing Statement seeks to follow the headings adopted in Counsel's Closing Submission. In responding to MML's draft Closing Statement those same headings are adopted here. IHSL does not propose to respond to every paragraph or every issue arising in MML's draft Closing

Statement – where a paragraph of MML’s draft Closing Statement is not addressed below that does not indicate that IHSL agrees with it.

*The Activity Database System, Room Data Sheets and Environmental Matrices*

- 10.2 At paragraphs 4 to 12 of the draft Closing Statement MML address the use of the Environmental Matrix in contrast to the use of ADB Room Data Sheets as a briefing and design tool. It concludes, at paragraph 11, that “*in light of the foregoing considerations, it would be reasonable to conclude that the approach taken in the present project was of “equal quality and value” to the use of ADB as a tool for briefing and design, and therefore potentially in compliance with CEL 19 (2010).*”
- 10.3 This is in stark contrast to the position set out by NHSL in its draft Closing Submission. NHSL disclaim the Environmental Matrix as a briefing tool and relies, in one instance, upon the BCRs themselves as the brief (paragraph 53) and then, in another instance, upon specifying compliance with SHTM 03-01 as an alternative approach to the use of ADB (paragraph 54). In light of those contradictory positions, it is not clear how either NHSL or MML seek to establish compliance with CEL 19 (2010).

*The Reference Design*

- 10.4 At paragraph 13, MML refers to the evidence of Mr Cantlay where he explained that the main driving factor behind the decision to adopt a reference design approach was to shorten the procurement process and reduce the amount of money spent on having three bidders developing a different design.
- 10.5 At paragraph 15, MML describes the design brief as being provided through, amongst other things, the mandatory elements of the reference design, the schedule of accommodation, the Clinical Output Based Specification and the list of guidance documents and standards with which the design was required to comply. It is noteworthy that whilst MML refers to certain items contained within the “Room Information” defined in Section 2.5.3 of Volume 1 of the ITPD and ISFT documents, it omits reference to the Environmental Matrix (which is another of the documents falling within the “Room Information” and which sets out the Board’s specific room requirements).
- 10.6 MML continues at paragraph 15 that the information ought to have been a sufficient design brief to have allowed IHSL “*to prepare its design, including producing RDS and developing the draft EM.*” This statement seems to disregard the instructions to bidders at Section 2.5.3 to incorporate the Environmental Matrix into the Room Data Sheets which they were required to prepare through the bid process. As noted in section 9 of this Closing Submission (above), if it was for the bidders to develop the Environmental Matrix they would have required access to clinicians and other stakeholders to ensure that it met the Board’s needs and the needs of the relevant patient cohort. This is at odds with the desired outcome of the use of a reference design which was to shorten the procurement process and reduce costs.

*The Procurement Exercise*

- 10.7 At paragraph 28 of its draft Closing Statement, MML submits that when the provisions in the procurement documents are viewed as a whole, it is “clear” that the Environmental Matrix was not intended to be mandatory. MML does, however, accept that the documentation did contain “some potential ambiguities” albeit this does not detract from the overall position that the procurement documents, viewed as a whole, made the status of the Environmental Matrix “clear”.
- 10.8 In setting out its analysis, MML refers at paragraph 30 of its Closing Statement to Revision J of MML’s “Approach to Reference Design” paper and explains that whilst initial consideration was given by NHSL and MML to the reference design Environmental Matrix being mandatory for bidders but that was not the final position nor was it the position, in MML’s view, that was communicated to bidders. If that was indeed the final position, it is apparent that MML and NHSL failed to clearly translate that into the ITPD and ISFT documents.
- 10.9 Paragraph 31 summaries Mr Cantlay’s evidence regarding the status of Volume 1 and Volume 3 of the ITPD and ISFT documents. Volume 1, he explains, was a procurement document which explained the procurement process to bidders and became redundant at Financial Close.
- 10.10 It is surprising then that, in its analysis of the status of the reference design during the ITPD and ISFT stage, MML does not begin with Volume 1 which explains in plain terms the status of the Environmental Matrix. Section 2.5.3 states that the Board’s specific room requirements are set out in a suite of documents defined as the “Room Information”. This includes the Environmental Matrix. Mr Stillie explained his understanding that the Environmental Matrix contained the environmental information that would otherwise have been contained in the environmental sheets contained in the ADB Room Data Sheet. The Environmental Matrix therefore set out the Board’s specific environmental room condition requirements. This also reflects the definition of “Environmental Matrix” contained in Volume 3 of the ITPD. The Notes for the Bidder Day similarly identify that the specific room requirements are set out in the Environmental Matrix and other documents. Section 2.5.3 obliges the bidders to incorporate the Environmental Matrix into their Room Data Sheets i.e., the bidders embarked on the design process obliged to meet the room requirements set out in the Environmental Matrix. If NHSL had not intended the Environmental Matrix to be mandatory or indeed to convey its contents as representing its specific room requirements it appears that something has gone significantly wrong with the drafting of Volume 1.
- 10.11 Volume 3, in contrast, was the Board’s Construction Requirements i.e., the output specification for the design and build of the project and which would form part of the Project Agreement at Financial Close. According to Mr Cantlay, Volume 3 was drafted in the form it was intended to take when included in the Project Agreement at Financial Close.

- 10.12 That being the case, Volume 3 of the ITPD and ISFT (i.e., Section 3 of Schedule Part 6 of what would be the Project Agreement) included the Environmental Matrix at Appendix C. As a matter of fact, the Environmental Matrix was issued to bidders as part of the Board's Construction Requirements during the ITPD and ISFT phase. It also demonstrated to the bidders that at Financial Close the Environmental Matrix would be found in Appendix C to the Board's Construction Requirements. There was no indication given that the bidder would somehow require to develop the Environmental Matrix into its own document or to be resubmitted as its own proposal.
- 10.13 The interplay between Volume 1 and Volume 3 explained by MML is clearly very confusing. Surprisingly, however, MML state that given Volumes 1 and 3 serve different purposes, provisions in Volume 3 do not assist in interpreting the provisions in Volume 1. This position simply cannot be correct. For example, Volume 1 defines "Environmental Matrix" by reference to the document contained in ITPD Volume 3, Schedule Part 6, Section 3, Appendix C. In this example, Volume 3 quite clearly informs the interpretation of Volume 1. Likewise, Section 2.5.3 obliges the bidders to incorporate the Room Information into its Room Data Sheets. One of the items of Room Information is the Board's Construction Requirements. Where else would bidders find the BCRs but in Volume 3 of the ITPD and ISFT documents? The separation of Volumes 1 and 3 is not as clear as MML would suggest.
- 10.14 MML refer at paragraph 32 to the inconsistent references made to Volumes 1 and 3 in Counsel's Closing Submission. One of those examples is paragraph 8 of the draft BCRs (which requires compliance with the Environmental Matrix) which MML say it is plainly incorrect to suggest is a direct instruction to tenderers. However, the bidders could not simply ignore Volume 3. Even if it is accepted that Volume 3 is future facing to Financial Close, paragraph 8 represented to bidders that it would at Financial Close be required to comply with the Environmental Matrix – this hardly would convey to a bidder that it was free to disregard compliance with the Environmental Matrix during the bid phase.
- 10.15 At paragraph 33 of the draft Closing Statement, MML refers to Clause 2.5 of ITPD Volume 1 which set out the mandatory elements of the reference design under reference to Appendix E. It is correct to note that the Environmental Matrix was not included in the mandatory elements in Appendix E. However, the Environmental Matrix is referred to in Clause 2.5.3 as "Room Information". Interestingly, clause 2.5.3 falls under the clause 5 heading "Reference Design and Mandatory Reference Design Requirements". In contrast MML contend that Clause 2.6 expressly stated that "Building services engineering solutions" were included as part of the "Indicative Elements of the Reference Design". MML contend that "Building services engineering solutions" would include the Environmental Matrix and such information was issued to bidders "for information only".
- 10.16 This is a curious position for MML to adopt. It entirely disregards the provisions of Section 2.5.3 which states, in plain terms, that the Environmental Matrix sets out the Board's specific environmental room condition requirements. Quite why MML would interpret the Environmental Matrix as a "Building

services engineering solution” under clause 2.6 when the Environmental Matrix is specifically identified as setting out the Board’s room requirements is unclear. MML’s position appears to confuse the Environmental Matrix as constituting a “design solution” whereas properly construed it sets out NHSL’s specific room requirements which a bidder’s design was required to meet.

- 10.17 Notwithstanding the fact that the witnesses’ subjective understanding of the interpretation of the contract documents falls to be disregarded, it is interesting to note that none of the MML or NHSL witnesses appeared to suggest that the Environmental Matrix was a “Building services engineering solution” falling under clause 2.6. One of the Core Participants raised a question with Counsel to be put to Ian Graham at the end of his evidence which took him directly to clause 2.6 but Mr Graham had not referred to clause 2.6 before that point.
- 10.18 At paragraph 35 of its draft Closing Statement, MML refers to Section C8.3 of the Submission Requirements at Appendix A(ii) of ITPD Volume 1. However, MML appears to overemphasise the fact that bidders were permitted to highlight proposed changes on an exception basis at the expense of underemphasising the fact that it stated that bidders must confirm acceptance of the Board’s Environmental Matrix. Given the clear requirement to bidders that it **must** confirm acceptance of the Board’s Environmental Matrix it is surprising that MML considers it was “made clear” that the bidders were to undertake their own design and it was anticipated that bidders could propose changes to the draft. Indeed, MML suggest that this provision “*was accordingly not about restricting a bidder’s ability to make changes, but rather requiring those changes to be highlighted so that there was clarity about what was being proposed in comparison with the EM produced at reference design stage.*” Giving the words “must confirm acceptance” their usual and ordinary meaning, if it was NHSL’s intention that this provision was not intended to convey a requirement to bidders that they were to accept the Board’s Environmental Matrix it is apparent that the provision has not been clearly drafted.
- 10.19 At paragraph 36, MML refers to the fact that the status of the Environmental Matrix was apparent from the document itself which stated that it was prepared for the Reference Design stage. If that was the case, one must ask why NHSL would (i) explain to bidders that the Environmental Matrix set out its specific room environmental condition requirements in Section 2.5.3 or (ii) issue it to bidders in Appendix C to the Board’s Construction Requirements which bidders would be required to comply with both during the bid phase and, if successful, at Financial Close under the Project Agreement.
- 10.20 At paragraph 37, MML states that the Environmental Matrix would provide information which the bidders could use but which they were not bound to follow. It is not clear why MML does not address the provisions of Section 2.5.3 of Volume 1 which says, in terms, that the Environmental Matrix sets out NHSL’s specific room requirements which the bidders were required to reflect in their Room Data Sheets.

- 10.21 At paragraph 39 of the draft Closing Statement, MML refers to the definition of “Environmental Matrix” contained in the ITPD Volume 3. This defined the Environmental Matrix as detailing the Board’s room environmental condition requirements (a definition which is consistent with the definition of “Room Information” and the description of the Environmental Matrix in Section 2.5.3 of Volume 1). Mr Cantlay explained that because the Environmental Matrix was defined as a “draft” it was anticipated that the final version of the BCRs for inclusion in the Project Agreement at Financial Close would have the Environmental Matrix reflecting the preferred bidder’s design and that this definition would be amended accordingly. This explanation is inconsistent with the definition which specifically explains that the Environmental Matrix detailed the room environmental condition requirements of the Board. Why, a bidder would be entitled to ask, would a bidder be required to develop the Board’s room environmental condition requirements and turn it into its own proposal? It must surely fall to the Board to set out its requirements – which it in fact did in the Room Information as described in Section 2.5.3. Furthermore, if Volume 3 was to depict what Schedule Part 6 Section 3 (the Board’s Construction Requirements) would look like in the Project Agreement, how could a bidder understand that the definition of the “Environmental Matrix” (used to demonstrate what Section 3 would look like in the Project Agreement) would “change accordingly”. Change to what a bidder might ask? This serves to demonstrate the ambiguity and inconsistencies in the procurement documents and why the parties have arrived at different interpretations. In any event, the definition of “Environmental Matrix” did not substantially change in Section 3 of Schedule Part 6 to the Project Agreement: the only change was that it would now be found in Section 6 and not as Appendix to Section 3.
- 10.22 MML also state at paragraph 39 that the Environmental Matrix appeared as an appendix to the draft BCRs in ITPD Volume 3: however, in the Project Agreement it was moved to Schedule Part 6 together with the Room Data Sheets “*reflecting its status as one of IHSL’s documents*”. It is correct to note that the Environmental Matrix was moved to Schedule Part Section alongside the Room Data Sheets. However, the Project Co Proposals were set out in Schedule Part 6 Section 4. The Environmental Matrix was clearly not part of the PCPs. The Environmental Matrix’s position in section 6 does not indicate that it was one of IHSL’s documents (if by that it was meant that it formed part of the PCPs). Notwithstanding its location in Schedule Part 6, the Environmental Matrix was still defined in Section 3 (Board’s Construction Requirements) as setting out the Board’s room environmental condition requirements.
- 10.23 MML invite the Chair to conclude that it was made clear to bidders that the Environmental Matrix provided to them at ITPD stage was not mandatory. It is submitted that when considering the parties’ submissions, no such finding is capable of being made.
- 10.24 It appears from paragraph 41 (and the subsequent paragraphs) that MML has confused the Board setting out its own requirements which bidders were required to meet with the Board taking on responsibility for design. The Environmental Matrix was described in Section 2.5.3 of Volume 1 as setting out the Board’s specific room environmental condition requirements. The Board is best placed

– having gone through the reference design phase with significant input from clinicians and stakeholders – to set out what it needs and wants. It is then for the bidders through the bid process, then the Preferred Bidder and ultimately the appointed contractor to deliver on that. IHSL did take on the risk of the design but that was benchmarked: it was responsible for ensuring its design met the Board’s Construction Requirements. The Environmental Matrix was one part of the Board’s Construction Requirements which set out NHSL’s specific room environmental condition requirements which IHSL’s and, in turn, its construction contractor’s design was required to meet.

10.25 There also appears to be a misconception by MML around the Environmental Matrix and the Board’s Construction Requirements. For example, paragraph 52 of the draft Closing Statement refers to Graeme Greer’s evidence that the Environmental Matrix had to be compliant with the BCRs. But the Environmental Matrix was issued by NHSL with the ITPD and ISFT documents as part of the BCRs. It formed Appendix C to the BCRs and the drafting anticipated that in the Project Agreement the Environmental Matrix would remain as Appendix C to the BCRs contained in Section 3 of Schedule Part 6. The fact that the Environmental Matrix was issued to the bidders as Appendix C of the BCRs appears to be a further significant failing in the preparation of the procurement documents if NHSL’s and MML’s positions on the status of the Environmental Matrix is to be accepted.

10.26 At paragraph 55.12, MML refers to the Environmental Matrix being included as part of the Reviewable Design Data. MML suggests that if the Environmental Matrix was a mandatory document, it is inconceivable that it could have been included as RDD. It is apparent from Volume 3 issued with the ITPD and ISFT documents that NHSL had always envisaged the Environmental Matrix forming Appendix C to the Board’s Construction Requirements. In the period following the award of Preferred Bidder status and Financial Close NHSL made comments on its own Environmental Matrix (unchanged by IHSL through bid process) and seven issues remained outstanding prior to Financial Close. It is apparent on a proper construction of the Reviewable Design Data provisions and the Environmental against the relevant factual background at the time that it was not the whole Environmental Matrix that was subject to RDD but only the seven points which had been identified as outstanding at the end of 2014 and which were included in Section 5 of Schedule Part 6 of the Project Agreement (Bundle 5, page 880).

10.27 At paragraph 57 of the draft Closing Statement, MML draws upon the hierarchy of provisions at paragraph 2.5 of Volume 3 to support its view that even if there was some misunderstanding about the status of the Environmental Matrix in the ITPD this made it plain that IHSL’s design required to comply with SHTM 03-1 regardless of the terms of the Environmental Matrix. This is a curious argument. First, it relies upon the provisions of Volume 3 to potentially disentangle any issues around the status of the Environmental Matrix at ITPD stage. However, MML’s position is that Volume 3 is future facing, representing that BCRs that would form part of the Project Agreement at Financial Close. If that is MML’s view, it is not clear what relevance paragraph 2.5 of Volume 3 would have to resolve ambiguities existing at the ITPD stage. Second, it is apparent from paragraph 2.5 of Volume



3 that it is concerned with the raft of standards and guidance that is referred to therein – properly construed it has no application to inconsistencies or contradictions between different contract documents (i.e., it is applicable to a specific context, it does not have contract wide application).

*The tender submitted by Bidder C*

- 10.28 MML addresses the tender submitted by Bidder C at paragraphs 65 to 74 of the draft Closing Statement. Bidder C had proposed changes to the Board's Environmental Matrix, one of which was to change the air change rates in single bed cubicles in critical care to 10 ac/hr. In essence, Bidder C had highlighted the error between the Board's Environmental Matrix and the SHTM 03-01 that was described by Mr O'Donnell in his evidence. It is not apparent why Bidder C made the change. In any event, on the basis that bidders were required to confirm acceptance of the Board's Environmental Matrix and highlight proposed changes on an exception basis it would have been readily identifiable to the bid review team that the change had been made. Given the change increased the Environmental Matrix from 4 ac/hr to 10 ac/hr it may be reasonably expected that this would have been flagged by the review team (given the knock-on effect on energy consumption, the need for enhanced ventilation apparatus etc. that an increase to 10 ac/hr would have had.)
- 10.29 The bid team consisting of NHSL and MML representatives did not interrogate the change and their evidence was that the change would not have raised a red flag. The error in the Environment Matrix explained by Mr O'Donnell therefore went undetected.

*The intensity of review of tenders*

- 10.30 There are a number of references in MML's draft Closing Statement where MML's general understanding of the risk allocation in an NPD contract has informed MML's view. For example, at paragraph 33 it is noted that MML did not include the Environmental Matrix in Appendix E as a mandatory document because "the design risk was to sit with Project Co" (notwithstanding the fact that the Environmental Matrix was described as setting out the Board's room environmental condition requirements). Or at paragraph 40, where it is said that the Environmental Matrix was not mandatory because such a conclusion was consistent with the key principle that design risk on a PPP contract sits with Project Co. Or at paragraph 55.16 where it is said that the suggestion that the Environmental Matrix was a mandatory is inconsistent with the key principle that "design risk" on a PPP contract sits with the private sector (with the exception of operational functionality). MML's general understanding and oversimplification of design risk appears to have had a significant influence in its interpretation of the status of the Environmental Matrix.
- 10.31 MML's general understanding of the design risk also appears to have influenced its approach to the tender review exercise. At paragraph 76, Mr Cantlay explained that so far as compliance with the BCRs was concerned, the onus was on bidders to confirm that they were complying rather than on NHSL reviewing the submissions to confirm compliance. The rationale for this approach apparently

lay in the risk allocation in an NPD contract. It was perhaps surprising to learn that in evaluating the bids against the bid criteria, particularly compliance with the BCRs (C21) the tenderer's statement that it would comply with the BCRs would be taken at face value. This oversimplistic view of the design risk appears to have contributed to the low intensity review of the bids which was undertaken.

#### *The Contract*

- 10.32 MML sets out what it contends to be the correct interpretation of the Project Agreement and highlights what it considers to be relevant provisions at paragraphs 87 to 91.15 of the draft Closing Statement.
- 10.33 Whilst MML accepts that the wording of the Project Agreement did contain some potential ambiguities about the status of the Environmental Matrix but when viewed as a whole the status of the Environmental Matrix was "clear". In particular, it is "clear", MML contends, that the provisions in SHTM 03-01 took precedence over the Environmental Matrix. Given IHSL, MPX and others take a contrary view it is submitted that displaces the notion that the Project Agreement was "clear" in stating that STHM 03-01 took precedence over the Environmental Matrix. IHSL and MPX would equally argue in response that it was "clear" that the SHTM 03-01 did not take precedence over the Environmental Matrix.
- 10.34 MML omits reference to clause 5.2.4 of the Project Agreement which provides that the Project Co shall be responsible for procuring that the Project Operations are at all times performed except to the extent expressly stated to the contrary in the Board's Construction Requirements or the Service Level Specification, in compliance with all applicable NHS Requirements. Clause 5.2.4 stems from the SFT's standard form of NPD Contract. The purpose of the clause is to enable a procuring health board to take a different approach from that set out in the NHS Requirements (which includes the SHTMs) in order to suit the particular needs of a particular project.
- 10.35 MML refers to Clause 12.1.1 of the Project Agreement (*Project Co shall carry out the Works so as to procure satisfaction of the BCRs*) and Paragraph 8 of the BCRs which provides that Project Co shall provide the Works to comply with the Environmental Matrix.
- 10.36 It is worth highlighting here the definition of "Environmental Matrix" contained in Section 3 of Schedule Part 6 of the Project Agreement. MML has omitted the definition from its analysis. It means:

*"the Environmental Matrix, which details the room environmental condition requirements of the Board required within each department/unit/space/area as set out in Section 6 (Room Data Sheets) of Schedule Part 6 (Construction Matters) (as varied, amended or supplemented from time to time in accordance with the Project Agreement."*

- 10.37 MML then refers to Paragraph 2.3 of the BCRs. The critically important words in paragraph 2.3 of the BCRs are “*unless the Board has expressed elsewhere in the Board’s Construction Requirements a specific and different requirement*” the Facilities shall comply with the NHS Requirements.
- 10.38 At paragraph 91, MML states that “IHSL” argues that the “*specific and different requirement*” covered by the qualification to paragraph 2.3 “*such that there is no requirement for it comply with the SHTMs.*” It is not clear to whom MML is referring by the reference in paragraph 91 that “*IHSL argues*”. It is also not clear where MML has derived the articulation of IHSL’s purported position which MML sets out in that paragraph. IHSL does not contend that there was no requirement for it to comply with the SHTMs. Clause 5.2.4 of the Project Agreement and paragraph 2.3 of the BCRs state that if NHSL has expressed elsewhere in the Board’s Construction Requirements a specific and different requirement then that specific requirement is to be complied with and displaces any obligation to comply with any differing general requirement in the NHS Requirements (including SHTM 03-01). In the context of the air changes in the single bedrooms and the multi-bed rooms in Critical Care, for example, where the Environmental Matrix identified a requirement for 4 ac/hr then there is no obligation to comply with any differing general requirement in SHTM 03-01.
- 10.39 MML refers to paragraph 2.5 of the BCRs which contains the Hierarchy of Standards provision. Clause 2.5 when properly construed refers to a choice between contradictory standards and advice referred to in the preceding paragraphs (e.g. the raft of NHS standards referred to in paragraphs 2.3 and 2.4) and not to any conflicts between published guidance and a specific requirement laid down by the Board. Clause 2.5 does not refer to specific requirements of the Project Agreement. MML has erroneously interpreted Clause 2.5 if it considers that it would be applicable to an inconsistency between the Environmental Matrix and SHTM 03-01. In that situation the “*unless the Board has expressed a specific and different requirement*” provisions of Clause 5.2.4 and paragraph 2.5 of the BCRs resolves any tension – the NHS Requirements give way to a specific and different requirement expressed by the Board.

#### *Findings and Potential Recommendations*

- 10.40 The Chair is invited not to make to the findings requested by MML in its draft Closing Statement.

**30 June 2023**