Scottish Hospitals Inquiry
Witness Statement of
Alan Seabourne

This statement was produced by the process of sending the witness a questionnaire with an introduction followed by a series of questions and spaces for answers. The introduction, questions and answers are produced within the statement.

Personal Details

1. Name, qualifications, chronological professional history, specialism etc – please provide an up-to-date CV to assist with answering this question.

A. Alan Seabourne,
Higher National Certificate in Engineering (Mechanical & Electrical) Higher National Certificate in Management Studies, Higher National Diploma in Microprocessors in Engineering. Honorary Fellowship of the University of Glasgow for outstanding services to the University. (**see CV - Appendix C**).

Professional Background

2. Professional role(s) within the NHS.

A. (see CV - Appendix C)

3. Professional role (s) at QEUH/RHC, including dates when role(s) was occupied.

A. My understanding is this question means my role in the New South Glasgow Hospital (NSGH) Project Team as there was no entity in my time regarding QEUH/RHC. Project Director NSGH from June 2006 to July 2013. (see CV - Appendix C)

4. Area(s) of the hospital in which you worked/work.

A. Does this mean physical areas? If so regarding my role as project director NSGH Project I worked both off site from June 2006 until June 2010 and on site at the constructions offices from June 2010 until July 2013. During my NHS career I have worked in many acute hospitals both adult and children's, mental health hospitals, learning disability hospital and health board corporate offices.

5. Role and responsibilities within the above area(s)

A. (see CV - Appendix C)

6. Who did you report to? Did the person(s) you reported to change over time? If so, how and when did it change?

A. For the role of Project Director NSGH I reported to Helene Byrne, Director of Acute Services Strategy, Implementation and Planning who was the Project SRO and Project Design Champion. Think she left sometime in 2010. I also had a linked Board Non-Executive Director called Ken Winter who was retired Balfour Beattie European Managing Director who was brought in by the Scottish Government to give some support to the Health Board regarding this project. After Helen left I reported to Jane Grant, Chief Operating Officer Acute Services NHS GGC and Robert Calderwood Chief Executive NHS GGC up until I retired in July 2013.

7. Who selected you for your role(s)? When were you selected for your role(s)? Please describe the selection process for appointment to this/these roles?

A. For my transfer from NHS Argyll & Clyde to NHS Greater Glasgow & Clyde it was a redeployment process (managed by NHS Glasgow and NHS Highland Leadership Teams) which included an interview process and an assessment process (around September 2025) arranged for all middle to senior management staff in NHS Argyll & Clyde Health Board who now needed to be redeployed after the Health Minister Andy Kerr dissolved Argyll & Clyde Health Board and put it under the control of NHS Glasgow and NHS Highland in 2005.

I applied for two jobs from the list available to me i.e. two similar roles to what I was currently doing at that time as no one being transferred was allowed to apply for their current job, I don't know why that was a precondition as it was never explained to any of us. My first choice was for the role of Director of Clyde Acute Services and my second choice was Chief Officer of Renfrewshire Health and Social Care Community Partnership (H&SCP). I was not offered any of my choices and I was offered the role of Project Director for the New South Glasgow Hospital Project (NSGH) sometime I think in November/December 2005. The job of Project Director NSGH was not on the list of jobs offered to

candidates so it was rather a surprise when I was told this was my only offer. It wasn't the role I wanted or applied for mainly because I was making a really positive impact in Inverclyde and enjoying what I was doing and getting excellent feedback from service stakeholders. I did not think this role would be a long term role because I thought it would never be funded. The lead officer for the transfer process was Ann Hawkins, Director of Transition NHS GG&C. I had many discussions with her about why I didn't want the role and what I did want and it was around March or April 2006 before I finally accepted her final offer and I started in the role in June 2006. For the other roles/jobs I had in the NHS see my CV attached, most of them had formal processes with relevant testing, interviews and independent assessors.

8. Had you worked with any of your QEUH/RHC project team colleagues, estates colleagues, or other NHSGGC colleagues prior your role(s) at QEUH/RHC? If so, who had you worked with before this current role? When did you work with this/these colleague(s)? What role were you in when you worked with this/these colleague(s)? How long were you colleagues in this/these previous role(s)?

A. As Project Director of NSGH I knew a number of the staff in the project team from being an employee of the same Health Board(s) during my career but as I remember it I only worked previously with one of the project team and that was Morgan Jamieson, Project Medical Director. Morgan was Acting CEO for Yorkhill NHS Trust for a period and before that a Paediatric Cardiac Surgeon at Yorkhill when I was working at Yorkhill NHS Trust as Operations Director between 1990 and 2000.

Specific role(s) at QEUH/ RHC

9. Confirm the role(s) that you held at NHSGGC?

A. Project Director, NSGH project and for other roles earlier in my career prior to 2000 refer to my (See CV – Appendix C)

10. Describe how you came to be appointed to these role(s)?

A. Refer answer 7 for role Project Director NSGH.

11. What previous working relationships, if any, did you have with those who selected you?

A. For Project Director NSGH role only one, Catriona Smith who was the lead HR manager for the transition programme team for staff moving from Argyll & Clyde Health Board to Glasgow & Highland Health Boards. She had previously worked for me as my HR manager when I was Divisional Director at Inverclyde Royal Hospital (2005/6).

12. Describe your role and responsibilities (including day to day) at QEUH/RHC from when you started at QEUH/RHC until you left on 31st July 2013.

A. My Role as Project Director NSGH was an administrative role managing and coordinating the processes of the work to be carried out. There was a Job Description for this role and suggest it would it might be helpful for the inquiry if this was obtained from NHS GGC, however here are some of the details: Directing and coordinating work; managing financial resources revenue and capital; managing staff personal and working resources; overseeing the council planning process in addressing all aspects of such a large project; managing/coordinating and working alongside professional advisory consultants; working with the contractor and their teams; reporting on progress and actioning feedback and ensuring programmes of the work were being completed within each of the phases of the work programmes.

I had a role to direct and enable a very substantial amount of NSGH project enabling works to be completed prior to the start of the project on site and also during the building of the project. Taking instruction from Health Board senior officers. Ensuring all works were managed on time and cost. Public face of

project, i.e. many meetings with the community stakeholders, politicians and other agencies. Ensuring the many stakeholders (external & internal) were involved. Liaison with council planning, Scottish Government, Architect & Design Scotland, Scottish Enterprise, Scottish Ambulance Service, Health Facilities Scotland, Health Protection Scotland, Scottish Water, Scottish Power and other external interested parties, property developers etc. This involved regular meetings with many groups and people from inside and outside the Health Board. Writing reports, doing analysis, managing my staff group, recruiting, constantly reviewing project options and financial information. Working alongside all senior contractor staff and their sub-contractors and their specialist advisors. Ensuring the phases of work were being progressed to the Health Boards requirements including planning the development, procurement, evaluation, design, construction, commissioning and migration all supported with internal and external resources.

There were many different activities I was involved with on a daily basis with the contractor team(s) with involvement on many aspects of the works. There was a very clear remit from the Government, Health Board senior management and their advisors (S&W, EY, PUK) that the project team were to ensure this project would not be an adversarial relationship with a contractor team because of the scale, complexity and cost as had happened in the previous projects and it was part of my role to endeavour to ensure a close partnership arrangement between the Health Board and the contractor(s) was enabled and maintained. I think there may be reference to this in a special comment/paragraph in the building contract. To that extent the contractor and the client worked out of the same site accommodation.

There was very clear instruction from the Scottish Government, Health Board and senior advisors to allow the contractor's team to take the sole lead on design and design risk, to let them innovate, let them take the risk and do not lead them or tell them what to do, very much the same as a PFI contract. This was evidenced from work carried out by EY to assess the market conditions (market sounding exercise) prior to procurement and to test the interest from the market to participate in such a large complex project and to obtain guidance

from the construction sector of what they thought would make a successful and viable procurement. This was probably one of the reasons why the level of design at procurement stage was only RIBA stage B/C for the hospitals and RIBA D stage for the new Lab facilities. Initial intention mainly advised by Peter Moir and the project team wanted to take the design further during the tender process but that was changed after the market sounding exercise. This is also when it was decided the project would be an NEC contract, that there would be a competitive dialogue process and that there would be a Professional Services Contract Supervisor role required and fulfilled by Capita, and hence, no shadow design team as previously planned. The project team requested that we keep on board Wallace Whittle as M&E advisors with a financial allowance being requested and approved for the service.

13. To what extent, if any, did your role change over time at QEUH/RHC? If so, why?

A. My role at NSGH never changed, it was the phases of the work/project that changed, for example from planning a project and taking it to market to then being involved as it was being designed and constructed, these were just different phases of work to be progressed and I was responsible for managing the processes, therefore, my role didn't change.

14. Where was your role in the hierarchy of the organisational structure at QEUH/RHC?

A. As Project Director NSGH I was second lead officer for the project and Helen Byrne, Director of Acute Services Strategy, Planning & Implementation was the lead officer who I reported directly. Helen Byrne reported directly to the CEO Tom Divers NHS GGC and was a Board level director.

15. Who did you report to, (name(s) and role(s))

A. Helen Byrne. Director of Acute Services Strategy, Planning & Implementation.

16. Describe your relationship with your supervisor in this role.

A. My relationship with Helen was as a direct report to her for the NSGH project including associated works and we worked very closely together. Helen was interested in detail and hence, I briefed her in detail in all matters as she required.

17. Please tell us which staff reported to you, and who you were responsible for in this role, and your relationship with them.

A. From memory full Project Team. Peter Moir Deputy Project Director, Shiona Frew Project Administrator (originally my PA), Morgan Jamieson Project Medical Director Paediatrics, Jane Peutrell Project Medical Director Paediatrics, Stephen Gallagher Project Medical Director Adult Hospital, Heather Griffin Adult Hospital Project Manager, Mairi McLeod Children's Project Manager, Fiona McCluskey Project Nurse, Jackie Barony/Stewart Infection Control advisor replaced Annette Rankine, Karen Connolly FM lead, Hugh McDerment Project Manager (including enabling works), Frances Wrath Project Manager (ASR) all infrastructure and building services and Medical equipment lead Tony Coccozo finance support, Mark McAllister Community Engagement Manager, Eleanor McColl IT Project Manager, Mark Grieg IT Support, Frank Carnie IT networks, Alan Rose Evaluation Team, Ian Powrie Estates lead, John McGarrity Bio-Engineering lead, Anna Daley Project Manager other supporting projects such as new Teaching and Learning Centre. Sam Sudesse Project manager (enabling works) Alastair Smith (Technical Manager electrical), Gibby Donnelly (Fire Officer), Liane McGrath Labs Project Administrator, Allson Hirst and Carrol Craig Admin Staff.

My relationship was as their overall manager to help, support and challenge them to perform the roles they had in the project team. We met very regularly in generally open plan accommodation both formally and informally. We were a reasonably close working group.

Like any team there were ups and downs but generally it was a good team in the sense most people got on with each other and everyone generally pulling in the same direction. I also had a number of professional advisors who worked with me and my team to support the project led by C&B and also BMJ Architects. My direct reports from above were Morgan Jamison, Jane Peutrell, Stehpen Gallacher, Peter Moir, Heather Griffin, Mairi McLeod, Fiona McCluskey.

18. How was communication between you and your colleagues? What communication issues, if any, arose?

A. We worked in a mainly open plan environment so communication was frequent between all members of the team and informal on many occasions. Formal communication between myself and the team were mainly via the weekly project meeting, which were held every week for the duration of the project until I retired. Communications occurred at many other different formal and informal meetings with other people and groups and on the telephone and electronic systems. I called many meetings with all or relevant members of my team to discuss issues that arose on a daily basis. Don’t recall any significant issues with communication.

19. How did you keep a record of work delegated?

A. Mainly via actions set at weekly project meeting and recorded or from other meetings of which there were many or from individual actions set by me to the team members which may be recorded on my computer or diary or just via conversation in the office or telephone (not recorded) or by one of my admin staff. Communications with individual team members were probably different depending on the phase of the project we were on and the issue in question. A record of all ongoing work with Brookfield including all workflows was maintained on their Aconnex system.

20. How was delegated work supervised?

A. Generally via the project meeting or directly from me via my deputy to individuals or groups of individuals or from actions falling out from the many other meetings myself and the project team attended dependent on the phase of the project we were in.

21. Which other QEUH/RHC teams or departments, if any, did you work closely with?

A. As Project Director NSGH I worked most closely with my immediate superior Helen Byrne and my deputy Peter Moir, and my finance manager Alan McCubben, professional advisors and most of the lead directors who led the services that would be transferring into the new hospitals and labs. Working arrangements were the same as you would find in any other similar environment. For example, I had communications and meetings with Board directors, some non-exec directors and depending on the phase of work we were in or the issue at the time. For example I might have a closer relationship with the Labs director and her staff if the new laboratory was at a critical point or difficult issues to address, or if I was dealing with the helipad design progress regarding its functional operation I would be working closely with the Emergency Department Director and staff or IT Director and staff it was an IT issue. I probably dealt with most departments in all 5 hospitals affected by the NSGH project in some way or other for example, medics, nursing, labs, finance, estates, infection control, facilities, IT, physics, bio-engineering fire procurement etc.

22. Please describe your working relationship with these QEUH/RHC teams or departments.

A. If the question means all departments within NHS GG&C Health Board then as mentioned in answer 21 above, I probably dealt with most of them via their directors, senior staff or senior clinicians. I would meet some staff personally or meet staff in smaller groups or meet staff in presentation mode with larger groups. For example, I would meet regularly with the senior leadership team for the children's Hospital which included directors, clinicians, charity personnel, managers and other staff members and I attended the Paediatric Medical Staff

Association on occasions. Also, I met with a range of hospital functions who were stakeholders in the new facilities including labs staff, infection control/microbiology, estates, facilities, IT, physics, bio-engineering, pharmacy, health planners, finance many of the clinical specialities of which there are over 35 each in paediatric and adult services.

I met with other Scottish Health Board senior staff and clinicians who were going to have services in the new hospital and labs.

23. What concerns, if any, did you have about any members of staff? If so, please describe these concerns. What action, if any, did you take in relation to these concerns?

A. I don't recall having any concerns about any member of staff other than the usual day to day issues that arise in any industry or organisation, either at project level, Health Board and government level that were out of the norm and I didn't raise any staff issues with my superiors that I can remember.

24. What concerns, if any, were ever raised about management/ managers? If so, please describe these concerns. What action, if any, did you take in relation to these concerns?

A. I do not recall anyone raising issues formally about management or managers. I had the usual team personnel issues I have had in every team I have ever managed throughout my career.

Site Selection

25. In respect of the site selection process please confirm the following:

a) Describe your involvement in the site selection process in respect of QEUH/RHC.

A. I don't recall having a huge involvement as I think the site had already been selected or the process was coming to an end when I started as project director. If the Inquiry has any specific information to help my memory after such a long time, please provide. I mostly remember working on options for the chosen site i.e. the Southern General Hospital.

b) Describe the risk assessments, if any, that were carried out? What was the outcome?

A. Don't remember.

c) What consideration, if any, was there in respect of proximity to Sheildhall Sewage Treatment Works?

A. I am sure it would have been considered by the Board senior officers but don't have the detail. I don't recall it being a huge issue at the many meetings I attended, it was probably mentioned a couple of times at both public and NHS forums. I am sure the Board senior officers informed us that the process at Shiledhall Sewage Works had changed or was going to change from a sewage treatment plant to a transfer station reducing the potential for odours affecting the hospital.

d) What do you recall being discussed at the meetings you attended? What evidence, if any, did you see that procedures had changed? Did you follow this up?

A. Specifically regarding Shieldhall Sewage Works, there were a couple of members of the public asking mainly about considering other sites away from the sewage plant because they thought the smell wasn't pleasant. This was asked by a very small number of people at public meetings and maybe the odd staff member raising this as query. My CEO informed me that this plant was or would change to a transfer plant, hence I had no further interest in it.

e) What consideration, if any, was there in respect of the Shieldhall Recycling Centre?

A. I don't remember any discussion on this other that potentially extending the campus in this direction in the future to accommodate research in life sciences.

f) What concerns, if any, did you have regarding site selection?

A. I don't remember this being a major factor in any discussions I heard and I had no concerns.

g) Whilst you do not recall this being a major factor in any discussions you heard, what concerns if any, concerns did you have?

A. I did not have any concerns about site selection.

h) What action, if any, did you take in respect of such concerns and what was the outcome?

A. I was not aware I had any actions to take, this (i.e. the site selection was driven by the Boards most senior officers in conjunction with government officials) and they would determine any actions and I don't recall being asked to do anything.

Procurement

26. Describe the funding PFI changes, your involvement, why the changes were made, who signed off on the changes and what the escalation process was in respect of the Board authorising these changes.

A. When I started on the project in 2006 it was to be a PFI procurement. Everything was geared towards this and Ernst & Young (EY) had previously been appointed to take this forward as advisors to the Board bearing in mind the significant financial, operational and delivery complexities of this type of project funding and process. This was during a Labour administration in Scotland and the OBC was being compiled to support the PFI procurement.

In 2007 the SNP won the Scottish Parliamentary Election. From that point my seniors advised me and other staff that the project was now on hold until the new SNP administration considered it. Sometime later that year or early 2008 we were advised by senior management that the project could go ahead to OBC and potentially FBC as long as it wasn't going to be any kind of PFI procurement. We were told that the new SNP administration would not accept PFI and therefore, the project had to be publicly funded (if affordable) and the new OBC would need to be amended on that basis.

I was told at a number of senior meetings with managers that this was a government decision/instruction and non-negotiable. I had no involvement in this decision and I presume the Boards CEO at the time was the senior officer to propose approval to the Board.

a) Was an explanation given as to why it could not be any kind of PFI project? What was the rationale given for this decision at the senior meetings you attended? Why did it need to be publicly funded?

A. It was a direct instruction. I was told that the SNP government would not consider PFI as a way of delivering new infrastructure projects. The rationale, I think this was part of their manifesto pre-election promises although I can't remember if it was made into a formal policy or not and subsequently as we know they came up with their own PFI version.

27. Were the risks and the resource implications of changing the procurement model from PFI to traditional (design and build) adequately assessed, in particular:

(i) the impact on commissioning.

(ii) the impact on independent validation; and

(iii) ensuring sufficient resources to manage and maintain the hospital post-handover?

A. I can't remember but as I stated in my response above my information was this was an instruction to be adhered to by the Board, it wasn't a comparison between the two types of procurement. However, I think there were papers produced setting out the Pros & Cons of the government procurement decision and presented to the GGC Board by the Boards advisors EY, S&W and Board Senior Managers.

There was a discussion about endeavouring to try and procure a longer term defects liability period (talked about seven years at one time) in any future public funded construction contract instead of the normal one-year period which at that time was pretty much the standard, in order to try and mitigate life cycle risk (as the client would get in a PFI) after handover. This didn't come to fruition because when EY carried out the market sounding analysis on behalf of the Board with selected main contractors, the feedback was that this was not

something they would consider signing up to in a capital funded building contract and a potential showstopper to the contractors bidding at all.

Subsequently, however, a two year defects liability period was achieved in the contract with Brookfield. In terms of the three sub questions above (I) and (ii) I am not qualified to say as I haven't done enough PFI contracts to have the experience to give an opinion and (iii) in PFI there is a resource plan agreed by all parties which is usually not changed and adequate to meet the needs of the facility throughout the concession period (usually 30 years), whereas, in a capital funded project the resourcing levels can be under pressure at any time due the changing financial circumstances within the NHS and government.

(iv) What are the life cycle risk factors that you would get with a PFI? Do you recall why a seven year defects period was initially sought?

A. From my knowledge, PFI projects would reduce the potential risk of a negative impact on resourcing future maintenance and lifecycle works because it has the funding for both built into the contractual resource plan at the beginning of the contract and hence, not being affected by government funding pressure/cuts further down the line, whereas non-PFI projects (capital funded) can be and often are affected, that's why PFI projects seem far more expensive. The seven year defects period was discussed in planning meetings with E&Y, S&W, C&B and Board senior officers as a potential way of mitigating some of the loss of opportunity of PFI, i.e. there could be a seven year's insurance/resourcing cover period by the contractor where the contractor was taking all the building structure and building services risks with obvious benefits to the Board. In addition, the Board would use this as an incentive to the contractor to drive higher quality in construction and at the same time provide guaranteed costs for maintaining the building at least for an extended period of time. This was tested by EY in discussion with contractors during the market sounding exercise and the clear feedback was that the contractors had no interest in such a commitment and indeed could drive them away from bidding the project altogether.

Employer's Requirements

28. Describe your involvement, if any, in the preparation of the Employer's Requirements (ERs).

A. The ER's were the responsibility of the Technical Advisors (TA's) consultants i.e. Currie & Brown and their team as part of their appointment. They set out a framework of the type of information needed and a process of how the ER's would be compiled, using their previous professional knowledge and experience. This involved many people and many meetings from all areas of the Health Board and other stakeholders and along with many other people I attended some of these meetings as did other members of the project team and other Board officers. The project team would have organised these meetings and made the appropriate arrangements for people to attend.

a) Who was responsible for providing the requirements for the Clinical Output Specifications and who approved the COS for inclusion in the ERs?

A. The COS process was overseen by the TA's and organised by members of the project team, led by Heather Griffin (Adult Hospital), Mairi McLeod (Children's Hospital), supported by Frances Wrath (ASR Project Manager), Morgan Jamieson (Project Paediatric Medical Director), Annette Rankine (IPC) with a significant input from the TA's Health Planners Buchan Associates and the previous health planners, Directions. There were also other Board staff involved including Estates, IT, bio-engineering, physics, FM etc. The data in the Clinical Outcome Specification was the responsibility of the user groups and their management teams. It was their role to input the COS's and provide the information required about their service needs, directed and supported by Buchan Associates and the other members of the TA team. Heather Griffin and Mairi McLeod led the process on behalf of the project team mainly supported by Frances Wrath, Fiona McCluskey and Annette Rankine and it was their responsibility to ensure all parties were in agreement with the COS content. I think there were COS' s complied before I started in 2006 by the previous TA team (Davis Langdon) but I am not sure to what extent that information was retained in any of the signed off COS's.

The role of the project team and the TA's was to meet with each of the clinical departments/specialties on a number of occasions and develop the COS for

each clinical area. Both the Adult and Children's Hospitals had an internal structure to approve the COS's to be carried forward to the ER's and design development. The Adult Hospital had a Clinical Advisory Group and the Children' s Hospital as I remember it had a Clinical Advisory Group and Project Steering Group (the senior members of Children's Services in Glasgow) who reviewed and approved them.

b) Would the COS have involved details such as air changes per hour? Who would have been involved in this aspect of the COS? Who would have been responsible for ensuring compliance with SHTM/HTM and relevant guidance?

A. I do not remember the detail in the COS's it is too long ago. I imagine the inquiry will have received these from the Health Board as part of your Section 21 Notice. As I said the TA team supported the COS process and any technical issues raised would be addressed by them.

The COS process was overseen by the TA's and inputted from a number of sources like project team members which included clinicians and infection control staff and managers (including technical managers) who had worked on other big projects supporting the clinical user groups (who may also have had IPC/ICD personnel in attendance) of which I think there were around about 80 groups. The Health Board will hold information on all who attended these sessions because they were recorded.

Any compliance issues in COS's development would be advised/managed by the TA's, if indeed COS's went to that level of detail.

c) Who was responsible for confirming what the relevant NHS Guidance was for the project

A. Technical Advisors.

d) How did sustainability and energy targets impact on the design

A. There were specific targets set by the Health Board /Government on energy and CO2 emissions and we had a directive to achieve both them and a BREEAM Excellent rating and this was considered during the design process.

e) What impact, if any, did this have on the design process?

A. I am not sure it had any impact on design process other than more meetings and more work because it was a very detailed process with lots of participants and many more meetings.

f) Describe your involvement and understanding, if any, in the removal of the maximum temperature variant? (please refer to Bundle 17, Document No.26, Page 1063) Why was the decision taken and by whom? What risk assessments, if any, were taken prior to making this decision? What was the impact, if any, in removing the maximum temperature variant?

A. This was an instruction to change the max temp to 26 C from 28 C from the Facilities Director to Currie & Brown to be included in the ER's after the process had started I think, following on from their experience of the two new hospitals (Victoria & Stobhill) just completed where they had encountered overheating with the higher temperature threshold and made the change to the Boards requirements to improve patient comfort levels.

The Board employed TA's to support design and it is their responsibility to carry out any necessary activities before recommending any solutions to the client. As I recall this impacted the general ventilation design and drove the solution of chilled beams along with a sealed building (suited infection control requirements) to achieve an acceptable level of comfort in the general single rooms with the max temperature limit. The TA assessment of the vent strategy advised that this was about comfort control and that as they considered all requirements in the ER's this was the most reasonable solution to achieve the Board's requirements.

g) What was your involvement, if any? How were you involved in this decision and implementation of this decision, if at all? Were you involved in groups which discussed this decision? Were IPC involved?

A This was communicated to the project team and myself as I remember, from Currie & Brown team who were lead advisors on the two new hospitals just built. This was an instruction to Currie & Brown and it was included in ER's. I do not recall being asked my opinion and I don't know of any other member of the project team who was.

h) Describe your involvement and understanding, if any, in the decision to use chilled beams. Why was the decision taken and by whom? What risk assessments, if any, were taken prior to making this decision? What investigation was made into their use in healthcare settings? What was the impact, if any, in using chilled beams?

A. Chilled beams were presented in the ER's by our TA's to be considered by bidders in providing heating/cooling solution. I also understand that they were allowable within# the SHTM/HTM guidance. They were proposed by more than one bidder as I recall as the solution to meet the Boards requirements with the new maximum temperature. During the ER process and the bidder selection process (including competitive dialogue) and the preferred bidder stage which involved a lot of people, I never heard anyone at any time raise any issues with chilled beams although I personally had no experience of using them, just like many other aspects of the building and building systems and I took my advice from the experts that the Board employed. The TA advised that they were allowed by SHTM/HTM at that time and no one in the TA team as I recall raised any negative issues about chilled beams. The TA's would need to advise about any risk assessment they carried out prior to recommending chilled beams but as they were allowed in the guidance I wouldn't be surprised if they didn't.

i) What involvement if any did IPC have in respect of this decision? As a member of the project team what responsibility, if any, did you have to ensure that IPC were involved in these decisions?

A. IPC were at the table with the other project team members involved during ER's, Competitive Dialogue, Evaluation, Preferred Bidder process up until stage 1 and 2 contract signing and beyond onto stage 2 design process up until stage 3 and 3a contract signing.

j) Who provided the specification for environmental data relating to air change rates, pressure differentials and filter requirements?

A. The TA's in the ERs and ADB sheets. Then responded to by the bidders and I think ZBP the Hospital designers provided an Environmental Matrix for all areas, this was Brookfield's 's responsibility. Subsequently then shared/discussed in the Reviewable Design Data (RDD)/ Room Data Sheets (RDS) process by the main contractor and team.

k) What role, if any, did the project team have?

A. The project team were involved in ER's and RDD process to endeavour to provide as much information and support to the contractor and their team to advised them of the functional requirements of the ER's. But we were very much led by our TA's and Capita, Project Supervisors and the Brookfield and ZBP on all technical issues. It was Brookfield's responsibility to deliver all technical requirements compliance.

l) Who was responsible for HAI-SCRIBE assessment regarding the proposed site development, design and planning and new construction?

A. Annette Rankin led on this and subsequently Jackie Stewart, who were the IPC support to the project team.

m) What responsibility, if any, did the project team have to ensure IPC involvement and engagement?

A. The Board senior offices set up the structure and the process of IPC involvement not the project team. IPC were an integral part of the project team like all other functional members (IT, Physics, Finance, FM, Estates etc.) who advised the project on, or gave advice on, or obtained advice on the issues the project was addressing/facing at the time. Infection control were also part of the whole process at certain times. The Board set up the project structure (including the IPC arrangement) and it was reviewed by organisations like the Scottish Government via the Gateway Review process (think in my time there were 5 Gateway Reviews and absolutely nothing negative about structure or process was reported), Partnership UK (on behalf of the UK & Scottish Governments worked along with the Board senior staff up until tender stage), PWC during the contract, carried out risk assessments on a number of occasions (10 day duration), Atkins carried out a short review process before procurement and the Boards senior team along with senior advisors E&Y, S&W and C&B all had many discussions about every aspect of the project structure and supporting processes and any advice was taken on board with no outstanding issues as I recall! Regarding IPC involvement, there was an email from Tom Walsh, Infection Control Manager to Heather Griffin advising he is satisfied with infection control input up until the tender process and he was reassured by plans for infection control input for the subsequent stages of the project. Also, the previous two Hospital projects just completed in 2009 i.e. the Victoria and Stobhill to my knowledge did not have an IPC person on the project team and I think that IPC and ICD involvement was via the Board's Medical Director, separate from the Project Director i.e. separate from the project.

n) Steering Group Minute 27th July 2010. Why was it high importance?

A. The minute states why it was of “high importance” i.e. it is regarding work required for the Government Gateway Review and there must have been a Government Gateway Review coming up (as I remember probably one before Full Business Case) and we were probably needing to do more work in this area as opposed to other areas of work which were probably progressed more. As I recall there was a lot of process and work involved in BREEAM and it took time, hence trying to move it on.

o) Describe my discussions with Susan Logan and her involvement in the project. Was further investment provided to increase to BREEAN Excellent?

A. Susan Logan was brought into the project around 2007/8, I think, as part of the work the Board had started some years back (I think before my time) with the Carbon Trust. She followed on from another person who was supplied by the Carbon Trust providing advice on energy and sustainability matters etc. but I cannot recall the name. Peter Moir recruited Susan on behalf of the Board to advise on all things energy, carbon reduction and sustainability including BREEAM. As I recall she was the BREEAM Assessor on the Laboratory project and the BREEAM Advisor on the Hospitals project. She inputted to design where it affected energy and where it could or would impact energy consumption, CO2 output and sustainability and as such had many meetings with the project team, the contractor and their design team regarding these issues. I recall, she also inputted to the exemplar design and participated in competitive dialogue, the evaluation process and compiled a BREEAM tracker for the project.

She worked directly for Peter Moir, (usually via Hugh McDerment, project manager) who she reported to on a daily basis in the project team but I had numerous discussions with her during my time all based on issues as described above. I cannot go into any more detail than this because of the time that has passed but if the inquiry has any specific question then please let me know.

She was an advocate of natural ventilation and tried her upmost to convince people that was the way forward in building design and the project team including myself were supportive of that but as I recall she never managed to get infection control staff on-board with her thinking.

The target was always BREEAM Excellent so no there was no further investment to raise it up to BREEAM Excellent.

p) Describe your understanding of the importance of BREEAM, balance against the importance of ensuring infection prevention and control. Was BREEAM ever prioritised against infection control and if so why and by whom.

A. BREEAM is an assessment used to measure the sustainability performance of buildings. This involves energy and carbon emissions reduction (decarbonisation) which is clearly part of the sustainability of the whole environment. The Scottish Government along with local authorities and universities in Scotland have declared a climate emergency in the past, therefore, there clearly is an importance to this agenda. Infection control is very important, that's why we were probably the first project in UK that I know of who included an infection control specialist on the project team. So in my opinion infection control was taken very seriously indeed by all health staff and at no time can I recall myself or anyone else associated with the project ever prioritising safety over BREEAM.

Ventilation Derogation

29. Explain your understanding of the ventilation design strategy contained in the Contractor's Tender Return Submission (11 September 2009) Please refer to Bundle 18 Volume 1, Document 8, Page 205. Was the ventilation system to be a mixed mode ventilation system (dependent on a non-sealed building) or a mechanical ventilation system (dependent on a sealed building)?

A. Firstly, I don't see any information in the document reference provided regarding mixed mode vent or mechanical ventilation. However, from memory, I think at the new max temp (26 C) which I think was a changed during the ER process and determined that it should be a sealed building (if this hadn't changed I think it could have been mixed-mode although that may have caused other issues such as greater infection risk). Susan Logan's (Boards energy advisor) preferred option was natural ventilation, acceptable in guidance but with absolutely no guarantees regarding air movement. She can also confirm that a sealed building was the preferred choice of infection control anyway

However, there was still an ongoing discussion about potentially introducing mixed mode ventilation right up until sometime in 2010, because there was a chance that certain areas of the hospitals could have mixed mode and potentially still in general single rooms. But in 2010 it was closed out after a meeting with Penelope Reading where it was advised and confirmed, I think by Wallace Whittle, that with some form of openings in the building to provide natural ventilation in the single bed rooms, that cross contamination between the rooms could not be ruled out, hence, a sealed building was the only way forward. So Wallace Whittle's advice was accepted by Penelope Reading that if we accepted a mixed mode with non-sealed building there was a chance of infection cross contamination.

30. Was the design and/or specification of the ventilation system as recorded in the Building Contract, in particular in the M&E Clarification Log (please refer to **Bundle 16, Document No. 23, Page 1662**) compliant with NHS Guidance?

A. The Board team were advised by our TA team member (Wallace Whittle) that the solution for general single rooms did not comply directly with NHS guidance (but complied with Scottish Building Regulations and CIBSE codes as referenced in ER's) because of the change in Max temperature, however, they (TA's) advised that in terms of achieving as many of the Boards requirements as possible this was the best and most reasonable solution for this type of general single room.

a) What IPC involvement was there, if any, in reaching the conclusion that this was about comfort not infection prevention and control? What assurances, if any, were given to the Board in respect of infection prevention and controls views on this matter?

A. The design summary log provided by the Inquiry, reference 20091204designsummary **(Bundle 43, Volume 2, Document 21, Page 308 at Page 5)** (I think this is an internal document between TA advisor teams and do not think it was received by the project team) is very helpful in providing a bit of clarity for me after all this time as it indicates that the derogation would need infection control review as noted by the TA team. This then would be an action for the TA's and taken forward and progressed by Mark Baird who was responsible for progressing all actions in all the logs. He would need to provide the information on who he actually spoke to in this regard apart from the IPC in the project team. The design summary I think is quite an early document after bid evaluation and before the start of the M&E logs and following on from this action Mark and his team would have progressed this action to conclusion. As far as I am aware, during preferred bidder stage, staff from the project team including IPC, medical and nursing staff continued to work on this with the TA's up to stage 1 and 2 contract signing (December 2009) finally agreeing general single rooms at 40 L/s (as referenced in Bundle 16 Doc 23 Page 1662) which for these rooms I understand is around 3 air changes per hour. There is an email in the system (I do not have it) from Douglas Ross to EY and the senior project

accountant confirming that raising the air changes to 40L/s had no additional cost.

I think David Hall from C&B led this part of the work under instruction from Mark Baird with project team members. It was then concluded by the TA team that this was the best and most reasonable solution to meet the Boards requirements and included in the M&E logs forming part of the contract.

Subsequently, during stage 2 design process (Appendix K, 2010 pre stage 3 contract signing) contact between project team members, John Hood and Peter Hoffman occurred while addressing another similar issue which confirmed there wasn't an issue with infection control risk by reducing the 6 air change rate to 2.5 (there is an email to this effect) and indeed he confirmed the same in his oral evidence to the inquiry. On the email chain, I refer, it can be seen that those involved in the discussion other than myself (copied in for information) are all clinical staff, Fiona McCluskey Project Nurse, Jackie Stewart Project IPC, Craig Williams Director of Microbiological Services, Tom Walsh, Lead Infection Control Manager, and Sandra McNamee, Assistant Director of Nursing Infection Control, clearly showing that IPC/ICD were involved and had knowledge regarding air change rates in the design. However, if Professor Hoffman had advised there was a risk by reducing air changes then the TA's would have had to rethink their decision on the ventilation design, which would have been accommodated into the project to mitigate any risk.

Also, during the Inquiry Hearings, the Board's current Director of Property give evidence that the hospital had theatre quality air throughout and no issues with 3 ACH's, indeed I am sure he stated when questioned that after nine years since the QEUH opened the Board had not carried out any risk assessment on these general single rooms as they did not see them as a risk to patients. He also states in his evidence that other acute hospitals in the Board area had less than 3 air changes per hour and didn't seem concerned.

Also, general single rooms in the New Children's Hospital in Edinburgh, completed after Glasgow Children's Hospital, can only guarantee 4 Air Changes as is the same with the general single rooms in the New Children's Hospital in Dublin, currently under construction

The Board's response to the Inquiry's Provisional Position Paper 5 on my reading, didn't seem to show any great concern about lower air rates in general single rooms (non-Critical) with regard to increased infections.

b) If not, please explain:

(i) Why this design was proposed; and

(ii) Why this design as accepted.

(iii) What role, if any, BREEAM played in the acceptance of this design.

A. As stated above it met as many of the Board's requirements as possible and supported the new max temp change instruction (taking account that this was a hospital with more or less all single rooms (described in SFN 30 as the optimum for infection prevention and control) and recommended by our TA's as the best and most reasonable solution and no risk to patients was raised to me or any member of the project team as far as I am aware. I don't think BREEAM played a direct role in the decision but obviously BREEAM is about reducing carbon and energy efficiency and apportions credits to these areas.

c) If you are of the view that it was compliant, please explain why, with particular reference to SHTM 03-01 2009 (Ventilation Design) Please refer to **Bundle, 16 Document No. 5, Page 342.**

A. N/A

31 The Inquiry is aware of the agreed ventilation derogation recorded in the M&E Clarification Log. Please refer to **Bundle 16, Document No. 23, Page 166**.

a) What was the scope of the agreed ventilation derogation recorded in the M&E Clarification Log?

A. General single rooms only. Stated in Clarification log and in M&E logs and also in ZBP Vent Strategy.

b) When did you first become aware of it and how?

A. Through the evaluation and preferred bidder process leading up to the signing of stage 1 and stage 2 of the contract in December 2009. It was recorded (hence discussed) via the Clarification Logs process which was used as a method for recording actions and decisions from the tender evaluation of the bids as agreed between TA's and Board. Mark Baird led this process from the TA team and he went through these logs on a number of occasions with a wide variety of people, indicating issues and solutions.

c) Was the agreed ventilation derogation restricted to general wards only?

A. Yes.

d) If so, how is this interpretation evidenced within the documentation (such as the M&E Clarification Log) and where is the specification located for areas that required specialist ventilation and isolation rooms?

A. My memory of the process is that the derogation (Alternative Design Solution) is captured in the Clarification Logs as general rooms which identified air changes in each area of a general ward and then transferred onto more specific M&E Logs. It is referenced in the M&E logs (provided by the inquiry) as the rooms with 2.5 air changes and if you reference that back to the Clarification Logs which describe each type of room with their proposed air change rates, it clearly states these as being the general ward rooms. Also, its stated in the ZBP Vent Strategy that they are discussing general rooms. This was the contractor's proposal, not the client, so they were very well aware of what they themselves were proposing and shouldn't be confused about any other area. The specification for all other areas was to comply with NHS guidance as stated in the ER's and should be designed accordingly.

e) Who else from the GGC project Team and Board were aware of the Ventilation derogation?

A. The staff involved in the evaluation and preferred bidder process. Mark Baird (TA team) took those staff through the logs on a number of occasions. I think as I recall, Mark Baird was instructed to share it and update key staff such as Facilities Director/Team and also I briefed my senior manager Helen Byrne regarding it and all other issues.

f) What action, if any, did you take to escalate your knowledge the derogation to the Board? If you did not take any action, why not?

A. As above, I gave my senior manager a detailed briefing on all issues form the evaluation and preferred bidder process and ongoing developments. Again this was presented as an environmental comfort issue and recommended by the TA's and Brookfield who were responsible for design.

g) Who presented this as an environmental comfort issue? What assurances did you personally seek from IPC to ensure this?

A. I have answered this in 30 a) above, i.e. the project team including IPC, nursing and medical staff were involved in discussion with the TA team led by David Hall and concluded this air change rate was acceptable taking account of all the Boards requirements, and that it was in regard to general single rooms only. And taking advice from our professional technical experts who posed the change and did not raise any negative issues about accepting this change.

h) How was the agreed ventilation derogation signed off by the Board?

A. Via the Logs process led by the TA's. And through the Appendix K RDD and RDS processes with the users in 2010 prior to stage 3 being approved.

i) How was this brought to the Board's attention (by whom)

A. Helen Byrne as a Board Director as previously stated if that is what you mean by the Board? Also, it was contained in the main contract documents available to senior Board officers.

j) Where, is anywhere, would there be paperwork recording the ventilation derogation approval

A. I Don't think there is a document specifically to the Board. However, I also don't think there is a Board derogation policy directing that the Board (as opposed to Board senior officers) must be informed of such issues. If SHTM or any other guidance set out a method to report such an issue, to the Health Board then, I would expect the Board's TA's to advise management accordingly, and action same, that was their role i.e. Technical Advisors to the Board. The contract documents contain the logs which were available to the Board's senior managers, it was recorded the logs. It was also discussed and agreed via the RDD/RDS process.

32 When did you first become aware of the ZBP Ventilation Strategy Paper dated on or around 15 December 2009? **Please refer to Bundle 16, Document No.21, Page 1657**

A. It is difficult to remember when I first saw the ZBP Ventilation Strategy Paper, it was an extremely busy time and so much information to consider and actions to complete personally but probably early 2010, although the work behind it had been ongoing since it was raised in the evaluation process and had more or less concluded in December 2009.

a) What action, if any, did you take when you became aware of this document and why? If you did not take any action please explain why not.

A. The document as I remember was the outcome of an ongoing process/discussions to address this ventilation derogation (as recorded in the Logs) led by our TA team along with Brookfield and ZBP from bid evaluation time to concluding their strategy around the end of 2009. My understanding is the TA team worked with Board staff including, FM, estates, clinical and infection control staff and operational mangers during the evaluation, preferred bidder via clarification log process that this was the most reasonable and acceptable solution for maintaining the comfort levels required for these general single rooms that met most of the Board's requirements. So personally I didn't take any action, I was extremely busy on many other issues and this was being manage by the Board TA's. I do not however, recall anyone raising any issues

to me about infection control from the TA's, ZBP or Board team. During this period the air change rate increased a bit from 2.5 air changes per hour to 40L/S and that was through discussion with the TA's and the Board team during the period up to December 2009. I was aware like others this was an ongoing process although I do not recall personally being involved in it. It was then taken into the stage 2 design process to be shared widely and discussed with staff in the design user groups via the project team staff and TA support and the contractor staff, especially ZBP. There were a number of design sessions with all clinical specialties (3 per user group I think) which included infection control staff who worked in the hospitals and no one to my knowledge raised any issues. My actions included briefing my senior manager and others about progress. Refer response to question 30 a) regarding Professor Hoffman comments during the design phase and before contract signing

b) Who put this the Board, when, what information was put to the Board? Was it not within your remit to put this information to the Board?

A. Again please see 31i.

My remit was to inform and report to my senior manager who was a Board Director. I briefed her in detail about all aspects of the project and her management team at times as well. I don't recall there being a formal paper to the Health Board and no one asking for one to be submitted. I also do not recall any Board policy on reporting derogations or any other technical issues beyond Board senior managers except when instructed to do so. The Board employed C&B as their professional technical advisors and as such they were responsible for fulfilling the professional tasks of meeting the Board's project and governance requirements, they had worked for the Board in the past on a number of occasions and knew how it operated.

c) What concerns if any did you have on reading this document?

A. Again it was described to us by TA's as the best acceptable way to achieve the Boards requirements and that it was explained to us that it was about comfort of the environment in general ward areas only and they raised no risk issues regarding infection control (if risks had been raised to me then I would have taken action) and that it was not to be implemented in critical clinical areas.

d) How the proposal meet the ER's if it did not meet the mandatory guidance (SHTM being one of which) as set out by the Board in the ER?

A. We were advised by the Boards TA's that this was the best way forward for the delivery of ER requirements, i.e. the best possible outcome taking everything into consideration.

e) Please refer to **Bundle 43, Volume 2, Document 21, Page 308**, at page 5. At page 5 of this document John Bushfield comments that 'This derogation

to the SHTM is not accepted. Any variation would require Board clinical infection control review.' Was infection control review ever carried out and if so, by whom? If review was not carried out by infection control, how, if at all, did the Board come to be satisfied that the proposed derogation should be accepted having regard to patient safety in light of non-compliance with SHTM?

A. Refer to answer in response 30 a

33 What risk assessments (if any), whether in compliance with the standards in HAI Scribe or otherwise, did GGC carry out or have carried out in respect of the change in the ventilation strategy that appears to follow the ZBP Ventilation Strategy Paper dated 15 December 2009? Please refer to **Bundle 16, Document No.21, Page 1657**

A. As stated previously the TA's, the Board's technical experts raised no risks as I recall in adopting this ZBP solution, they informed the project team that this was the most reasonable solution going forward taking all aspects of the ER's into consideration. Any risk assessment in accepting and recommending designs solutions is part of the TA's design scope of work before they recommend it to the client, hence, the Inquiry would need to discuss it with them for a more detailed explanation but again as previously stated they worked along with project team members to accept the ZBP solution. I would also assume that before any patients were admitted to these general ward areas IPC and ICD would review and assess they're suitability for clinical operation after testing, commissioning and validation (if indeed validation was appropriate for general rooms) and therefore, approve or not approve them for use as general clinical areas. This is what Dr Inkster did in June 2016 some eighteen months after practical completion of the works, why was it not done in 2015 when the building was handed over. I would expect infection control to provide that approval prior to patient occupation. During oral evidence the Board's Director of Property stated that the Board had not carried out a risk assessment on these rooms, indicating that they seemed satisfied with them.

a) Who from the TA advised there was no risk to patients, who would have assured them of this from IPC?

A. We had numerous meetings about many things in this period mostly if not all led by Mark Baird and he may have explained it to us or Whittle explained it, I can't remember as it is too long ago and very difficult to be specific about exactly who said what, there was a lot going on at that time and it is circa sixteen years ago.

b) Had checks been carried out prior to handover and areas been found not to have been approved, what in your view, would have happened?

A. If those checks were in critical clinical areas then rectification would have been necessary before occupation and, if they were in general areas i.e. non-critical single rooms then probably some form of work around would be sufficient. Subsequently however, we have seen the Health Minister stop occupation of a new Hospital facility because of ventilation issues in critical areas only!

34 Was the Ventilation Derogation recorded in the Full Business Case? Who was responsible for doing this? If not, why not? If you were aware that it had not been recorded in the Full Business Case please explain what action, if any, you took.

A. I am not able to answer this question, some 16 years later. Only comment I would make is I don't think there was much technical detail in the FBC as instructed via many meetings and discussions with other more senior colleagues. I am certain the inquiry will have access to the FBC to provide the answer.

a) Who was in charge at the time of the final business case presentation where the ventilation derogation was not mentioned? Why was it not mentioned at that time?

A. What presentation is being referred too? When asked to participate in this process I raised the issue about remembering things from all those years ago, I was advised by Wilma Johnston-Graham the inquiry team would help with memory issues by providing information to support their questioning, so it would be helpful if you could do that. I went to many meetings in my time as PD and many of them about FBC, can you be more specific or send me this presentation and I will respond?

35 Which senior IPC individual was responsible for signing off the departure from SMTH 03-01 in respect of the agreed ventilation derogation?

A. The Board did not have a senior IPC or ICD attached to the project, only senior IPC/ICD staff working in the service who could be asked their opinion via project team or others if required. From your questions thus far, I think there is an assumption, a misunderstanding by the inquiry team that IPC/ICD staff were fully involved or always involved in past capital projects as a normal part of project teams, this is just not the case in my experience. In the many, if not all capital projects I have previously been involved with or known about. Infection control specialists were not integral to project delivery and were probably asked at the outset of a project for their views on the proposed project just like the other hospital functions, they weren't attached or seconded to projects to approve or give advice on an ongoing basis as far as I am aware. However, the Board took the step to establish an IPC member of staff as part of the project team and this was the first time in my experience that this had occurred.

The project team operated a hub and spoke model where members were expected to relate issue to their departments/functions when required (e.g. IT, IPC, Physics, Bio-Engineering, FM, Estates, Pharmacy, Finance, Community Engagement etc.) and feedback questions or issues, I think this was similar to the process used for the newly completed Stobhill and Victoria Hospitals and indeed when I joined the project team it already had been set up with some of the same staff from those two projects. There were no IPC/ICD staff attached to the project team for the two hospitals just completed i.e. Victoria and Stobhill that I am aware of, in fact, my understanding is the Project Director on these two newly completed projects did not relate at all to IPC/ICD and this was a role carried out by the Board's Medical Director. After visiting a few projects in the UK prior to the procurement of the NSGH, again we found that we were the only project team who had a dedicated IPC member. The hub and spoke structure was to enable the project IPC representative and the other project team members to communicate with their own functions and on any of the issues being addressed at the time and feed Back concerns or otherwise and I do not recall getting any concerns fed back.

Tender and appointment of Main Contractor

36 Describe your involvement, if any, in respect of the selection process whereby Multiplex were selected as the preferred bidder.

A. I was a member of the Board group of staff who carried out the evaluation. I participated in a number of groups and joined in the scoring process to evaluate the tender bids. The process was developed by the TA's in discussion with financial advisors (EY) and legal advisors (S&W) and Board senior managers. The process was led by the TA's with the administration and organisation of the process carried out by the project team staff. There was a set format for scoring (part of the tender documents) presented with the tender bid information. I was a member of the evaluation team and we were led by C&B who managed the entire process. All information in the evaluation process was agreed by members of the Board's senior team and advisors EY & S&W prior to the procurement starting. The overall scoring mechanism was overseen by EY and selection was based on the Most Economically Advantageous Tender (MEAT).

a) Why were Multiplex awarded the contract following the competitive dialogue process? What distinguished Multiplex from the other bidders to make them the preferred bidder?

A. Brookfield were awarded the contract because they scored the highest in the evaluation process with the highest MEAT score. This was all overseen by EY and reported to the Board. All recorded and held by the Health Board.

Design and Construction and Role in the QEUH/RHC Project

37 Explain how the Clinical Output Specification (COS) for the design of the Wards was confirmed and signed off. In doing so describe the purpose of the clinical output specification, and your involvement.

A. The COS was a document completed by the clinical departments/specialties user groups in association with the TA team especially the Health Planners to describe their requirements for service in the new hospitals and members of the project team. I think some of the COSs may have been completed prior to me starting in 2006 by the first set of Health Planners (Directions) who were part of the Davis Langdon TA's (first set of TA's) because there was a schedule of accommodation compiled when I arrived and ongoing discussions about the clinical requirements, for example trying to determine the number of beds required in each hospital. As I recall the Adult and Children's Hospitals both had an internal approval process for the COSs which included clinicians and senior managers.

I think the Children's Hospital had a Clinical Advisory Group and Project Steering Group and the Adult Hospital had a Clinical Advisor Group. The process for adults was overseen by project team member Heather Griffin and I don't think a project doctor had been appointed tor adults at that time and for the children's it was overseen by Mairi McLeod and Project Medical Director Morgan Jamieson all supported by Frances Wrath from the project team along with Infection control and nursing and health planning support from TA's. I personally had very little involvement in the development of the COSs other than working with the Board team to try and determine the bed model's and to ensure the COSs were being completed when required to suit the project programme, which had very tight timescales

38 Explain the purpose of the guidance relied upon by the design team and why this was important.

A. To comply with mandatory or statutory regulation or to consider other guidance as appropriate for their design solutions. For guidance it is important to be considered on a project by project basis to achieve the best outcomes possible. On the national guidance documents, it clearly states this is general guidance only.

39 The Inquiry understands that designs and Room Data Sheets (RDS) were approved through the Reviewable Design Data (RDD) process. Describe your role, if any, in the RDD process and User Groups.

A. I think my main involvement was with some of the initial design pre RDD workshops where the contractor/designer set out their thoughts and strategies on the topics and we then agreed the general way ahead. After this, members of the project team, Capita (design compliance) and the contractor team would continue with the RDD process along with the users, with the overall programme overseen by Peter Moir and David Hall with the technical detail managed by Frances Wrath, supported Mairi McLeod, Heather Griffin, Jackie Stewart and Fiona McCluskey, Eleanor McColl, John McGarrity who were reviewing design and compliance in the RDD process. They would also have staff from the contractor Brookfield, Mercury, ZBP, Nightingales and Doig & Smith to explain any construction, design or cost issues. I did not have very much involvement in the user group meetings.

a) How were members selected to be part of a user group? What criteria was necessary to be selected as part of a user group?

A. If I remember it correctly, there were two lots of user group participants, i.e. pre and post tender offers. I think there was a core of staff across both sets but there were changes due to staff leaving, changing jobs etc. The service directors in conjunction with their clinical directors chose the members of these groups and communicated to senior management. I do not know what criteria they used for selection. Seemingly there had been problems in the past with such groups and hence, the service directors were instructed to ensure the membership was appropriate and controlled by them.

b) Confirm who attended the user groups meetings from IPC, Estates, Clinical and the GGC Project Team for the following areas: Ward 4B – QEUH; Ward 4C – QEUH; Level 5 – QEUH; Critical Care – QEUH; Ward 2A & 2B – RHC; PICU RHC – RHC; all Isolation rooms

A. I cannot after all this time remember the names of the staff who participated or attended in each group set out above outside the project team never mind breaking it down to functions and specialties, there were over 80 groups in total, the inquiry will need to obtain this information from the Health Board as it was all recorded. From project team however, there would have been (unless off work or doing something else), Frances Wrath, David Hall, Heather Griffin, Mairi McLeod, Annette Rankine or Jackie Stewart both infection control, Fiona McCluskey Nursing, Peter Moir (to some extent), Karen Connelly FM, Capita staff and other project team staff as required and other TA staff such as Wallace Whittle and Buchan's. Also, contractor staff from Brookfield, Mercury, ZBP and Nightingales, Doig and Smith Quantity Surveyors and their Health Planner, Tribal.

c) What steps, if any, were taken to ensure that an appropriately qualified source of IPC advice was an integral part of the Project Team?

A. We had a dedicated IPC nurse in the project team, this was the first time in a capital project this had occurred both in Glasgow Health Board and in Scotland, probably UK. The IPC member was supported by the IPC central team and the IPC and ICD's from both Adult and Children's Hospitals, especially when they met with the user groups. Also, IPC's and ICD's involved in the ER developments and COS development.

d) How often were user group meetings scheduled to review design proposals and agree the design with the user groups?

A. Probably about 3 times in 2010 prior to stage 3 being approved and contract signed.

e) Describe how the designs and the RDS approved to proceed to construction.

A. There were pre RDD workshops to discuss design philosophy and design strategy presented by Brookfield, ZBP, Nightingales and Mercury. From that we had the Reviewable Design Development process (RDD) whereby more detailed designs would be developed and passed to individuals for their review. This was managed via A, B, C, D status review process where members of the project team, led by Frances Wrath, David Hall and supported by Capita and Peter Moir, Mairi McLeod and Heather Griffin, Fiona McCluskey, Jackie Stewart along with service users and the contractor teams as mentioned above, the project team members would give the design in question a status of ABCD. The project team's role was limited to clinical and operational functionality i.e. the end user requirements and this did not include approving technical specifications or technical compliance which was always the responsibility of Brookfield and no one else as in the ER's. The process was along the lines of;

A = Ready for construction. This was a confirmation that the design looked functionally correct in line with discussions at pre RDD workshop and acknowledged the contractor could move forward to construct as it looked reasonable to achieve Boards requirements but it was the contractor, as in the building contract, no one else, who had full responsibility to ensure all compliance technically was achieved which would finally be confirmed at testing/commissioning/validation prior to acceptance by client via Capita on behalf of the Board.

B = Needs some minor alterations but generally can prepare to move to construction.

C = Needs more work before move to construction and revisited re ABCD.

D = Not acceptable and needs re-think.

This would all be processed through the Brookfield's Acconex system. All information including marked up drawings, and approval signatures, i.e. all the workflows information. The design approval procedure would be used to review and approve a range of deliverables such as clinical functionality at departmental and room level, finishes, colour schemes, materials and components etc. There was a form to be completed which recorded this.

f) Describe your involvement, if any, in the design and RDD process for the Schiehallion unit, PPVL and BMT rooms and PICU in the RHC

A. As I stated above, I might have been involved in the early pre RDD workshops developing the strategies but not usually in the RDD process detail.

g) Describe your involvement, if any, in the design and RDD process for the PPVL and BMT rooms in QEUH.

A. If referring to the changes to ward 4B I wasn't involved.

h) Describe your involvement in the design and RDD process for the spaces to house immunocompromised patients, Ward 4C, BMT Unit, Infectious Diseases and the Critical Care Unit in the QUEH.

A. With reference to the Adult Hospital. Infectious Disease Unit, there wasn't one in my time as I remember. Ward 4C, I don't recall this being a specialist ward, I think it was a general ward. The BMT Unit, (which is 4B) I wasn't involved. Critical Care Unit, as detailed above I was possibly involved at pre RDD workshops.

i) Describe your involvement in the design and RDD process for Isolation rooms.

A. Do you mean single isolation rooms or PPVL rooms? Also, do you mean Adult or Children's or both? Probably as above in (f) at pre RDD design workshops, but not anything to do with ward 4B BMT QEUH.

40 Please describe how the technical requirements (air change rates, pressure differentials and filter requirements) for the rooms were managed and approved, including your role and involvement.

A. Apart from the derogation of general single rooms as discussed above, all other requirements for air changes, pressure and filtration should be as stated in ER's i.e. in compliance with relevant guidance. Any deviation from the ER's would be notified and considered probably through the weekly Early Warning meetings or other meeting sessions with the contractor/designer, although I don't recall any.

The contractor is responsible for the compliance of all systems and Capita is responsible for confirming this to the Board at design and installation stage and/or at commissioning and validation stage. The process would be the RDD process as describe in 39e) above. I have already explained my involvement.

41 What guidance was considered in the design of wards to accommodate immunosuppressed patients, what processes were in place to ensure guidance compliance? Were there any changes to the design during the design and build, if so, please describe any such changes, describe the impact, if any, on guidance compliance, and described the sign off process for any such changes, your involvement and how any changes were communicated to the Board. What external advance, if any, was sought in respect of design changes?

A. These areas should be compliant with the ER's as they contained the user and technical requirements as compiled prior to procurement. Other than ward 4B (BMT change) in the adult hospital where I did not have any involvement in design, I don't remember any areas of the hospital deviating from the ER's. I do not recall anyone advising that specialist rooms areas or departments not compliant with guidance. Advice would be sought from Capita on compliance and the TA's on any proposed design change affecting compliance. With regard to the change process I suggest the Inquiry review the process used for BMT (ward 4B change) in the documents available which will identify the change process, otherwise I do not have that information to hand.

42 Who was responsible for confirming filtration and HEPA requirements and who approved this from the GGC Project Team?

A. I think in the ER's, the TA's would have identified filter usage as an output from meeting users and estates department personnel during the ER development process. There may have been changes during the design and build process but I don't remember if there were any changes. Also, it can be normal for either clients or contractors in building projects to be responsible for the supply and fitting of all or some filters and I cannot remember what our contract stated.

43 In respect of any derogation/ departures from guidance which senior IPC individual was responsible for signing this off?

A. As previously mentioned, there was no nominated senior ICP or ICD person for the project only the IPC nurse attached to the project as set up by the Board who if required would liaise with the relevant staff IPC/ICD.

44 Describe your involvement and understanding, if any, of the decision to remove carbon filers? What was the rationale behind this decision, who was involved and what advice, if any, was sought in reaching this decision?

A. It is hard to remember to remember the detail of individual items like this but I think they were removed. All information on this would be in the Early Warning meeting notes (all recorded) where topics like this would have been discussed and actioned. A record of events would also be contained in Peter Moir's electronic files/folders as he tracked all PMI's and CE's and if the filters were removed then there would be a PMI and a CE. These Early Warning meetings would normally be attended by myself, Peter Moir NHS and David Hall and Douglas Ross (TA's) and Brookfield staff led by John Ballentyne and Mike Sharples (supported by sub-contractors, consultants as required). Discussions/actions from these meetings would be discussed at weekly project team meetings or in some of the many other meetings held by NHS staff.

45. The Inquiry understands that there were schemes of delegation in place, delegating the discharge of the Board's responsibilities to the Project Team for certain matters. Please confirm your understanding of what decisions the Project Team were responsible for by virtue of the schemes of delegation.

A. From my memory there was not a scheme of delegation the Inquiry refer from the Board to the project team setting out delegated limits on construction and design decision making. The Board had a number of schemes of delegation as part of their corporate governance and the main one that would impact the project team's work most would have been Standing Financial Instructions (SFI'S). This scheme of delegation covered a range of areas of Board business, providing threshold limits of delegation to officers including; budget management, capital and revenue expenditure, procurement, stock management, pay, non-pay, audit etc. etc. but I do not recall there being a specific scheme of delegation from the Board to the project team setting out limits of decision making in the delivery of the project other than those covering capital expenditure in the SFI's. Within the SFI'S both myself and my superior had thresholds of expenditure we could not exceed on the project. If my superior or myself were requesting funds above those threshold limits (not sure it ever happened) we would need to refer to a Board Sub-Committee, i.e. Performance and Review Group (PRG) not the Board.

If the amount being requested was above the PRG threshold limits the PRG would refer onto the Board for approval, again don't recall it happening. As I recall only financial matters were referred to the Board or Board Sub-Committee for approval, not technical matters, these were approved by senior officers. Regarding design and construction of the works, senior Board officers delegated the design review process (not the design itself, the process) to the project team to assist the main contractor team in the design and construction of the hospitals and laboratory buildings works, the contractor being totally responsible for design and construction of the works to fulfil the building contract.

I do not recall there being a list of items (scheme of delegation) that required the project team to get approved by the Board or Board Sub-Committee. Anything that was considered necessary to go to the Board or Board Sub-Group for approval would be decided by senior Board officers above my level, not by me or any member of the project team and anything that did go to the Board or Board Sub-Committee would be vetted by those same senior officers and accepted by them in the first instance before being submitted. The project team via myself provided the PRG (not the Health Board) with a regular update on progress and this was also vetted by my senior managers before submission.

a) In the context of the QEUH/RHC what decisions did the Project Team take by virtue of the schemes of delegation? Please provide examples for context.

A. See above Q45. As stated, I don't recall a scheme of delegation from the Board specifically to the project team, but from memory and in trying to be helpful and assist the Inquiry, an example of the kind of issues I think the Inquiry refers would be: if a department, for example say surgery, had an agreed number of rooms in a ward or agreed number of theatres in the theatre suite and there was a request by the users to increase that number of rooms in a ward or theatres in a theatre suite, then Board senior officers would instruct me as PD to take the proposed change to the Board Sub-Committee not the Board (under their direction) and set out the detail and the consequences of the change for their approval.

If, on the other hand the users wanted something changed technically for example within a ward or a theatre suite area (with no cost increase above delegated limits) then the project team and senior officers would deal with it without going to the Board Sub-Committee for approval and certainly not the Board. I don't recall the Board being asked for approval on technical issues (nor do I remember there being an instruction to take any technical decision to the Board) or anything else for that matter (only Sub-Committee) but it is a very long time ago and maybe I am mistaken.

Another example of not referring technical issues above to the Board or Board Sub-Committee would be an issue previously mentioned in my statement, the issue around the selection of the water taps, this would never have gone to the Board or Board Sub-Committee for their approval as it was technical and hence, it wasn't required. In my role, the main criteria for seeking Board or Board Sub-Committee approval would be regarding the exceedance of financial thresholds.

b) What decisions were you responsible for by virtue of the schemes of delegation?

See above Q 45 a). My decisions were in line with previous answer. Taking issues to Board or Sub-Committee of the Board of a financial nature not technical.

c) What matters and decisions were reserved for the Board?

A. Regarding the project, probably the business cases only with any other matters referred to the Board Sub-Committee as decided by senior officers at any given time and these would not be technical issues but certainly issues that were above the financial delegated authority. As I have stated above anything that caused unplanned resource consequences and anything that was outside Board senior officer financial delegated limits.

d) Where were matters regarding the schemes of delegation, responsibility for decision making and the like set out?

A. Probably they might be in the Board corporate policy documents I presume, it's too long ago and I don't remember.

Bone Marrow Transplant Unit (BMT) and Ward 4C

46 The Inquiry is aware the BMT service was to transfer from the Beatson to the QEUH as noted in the meeting minutes from the Quality and Performance Committee dated 2 July 2013 (**Document A40241860** to be added to Bundle) This was confirmed in a change order request, issued by Jonathan Best in July 2013 **(Please refer to Bundle 16, Document No.29, Page 1699)**. The Inquiry is aware that you retired on 31 July 2013, prior to your retirement what was your understanding and involvement, if any, in respect of the following:

a) Risk assessments/ HAI Scribes carried out prior to the change order request?

A. I don't remember ward 4 C was anything other than a general ward area. With regard to BMT (Ward 4 B) I am not sure when this was first raised as a potential change, sometime early in 2013. I think and I was told this was a proposal from the Board's Medical Director, Jenifer Armstrong. Jenifer Armstrong was as I remember the senior manager for IPC'S's and ICD's so I would assume she would have got them to carry out a patient risk assessment before submitting proposed change to the Health Board. I didn't really have much to do with this because I was retiring, had submitted my formal notice and it was agreed I should concentrate on current works. Hence, Peter Moir took the lead on this supported by David Hall.

b) Confirmation of technical and environmental requirements (in particular air change rates, pressure regimes and HEPA and air permeability requirements) to accommodate the BMT Unit at QEUH/RHC?

A. Not involved.

c) Attendance and involvement in any design review meetings were held to confirm with the user groups to confirm the requirements for the BMT Unit.

A. Not involved.

d) Discussion with Multiplex regarding the proposed change order and the impact on Air Change Rates and Pressure Differentials?

A. Not involved.

e) Involvement with Infection Prevention and Control in respect of the proposed change order?

A. Not involved.

f) What ceiling types were specified and approved for use in Ward 4B? Who from the GGC Project Team approved this? Describe your involvement, if any? What was the impact, if any, of the choice of ceiling tiles? What concerns, if any did you have regarding the choice of ceiling tiles?

A. Not involved.

g) What concerns, if any, did you have regarding the final design specification of Ward 4B, and what action, if any, did you take in respect of these concerns?

A. Not involved.

47 The Inquiry is aware that the change order not only confirmed that the Bone Marrow Transplant (BMT) service would transfer to Ward 4B in the QEUH but also that the haematology patients that were originally planned to accommodate Ward 4B would move to Ward 4C.

a) Describe how this change was communicated to the project team and Multiplex and how this change was captured in the design and specification documentation.

A. Not Involved.

Ward 2A

48 The Inquiry understands that Ward 2A/2B is the paediatric-oncology Unit and includes the Teenage Cancer Trust and the paediatric Bone Marrow Transplant (BMT) Unit - the department is known as the Schiehallion Unit.

a) What is your understanding of the intended use and purpose of the Ward 2A/ 2B?

A. As I recall it was the children's cancer unit and used for that purpose as described in the question, with 2A being inpatient and 2B outpatient services. Cancer patients require protective environment at certain times during their treatment.

b) Did the facilities in Ward 2A/2B as designed provide that protective environment? If so, how so, if not how not?

A. I left the project some sixteen months before practical completion and nearly two years before Ward 2A/2B was occupied. I have no idea what the end result was but would assume that all tests including validation were carried out before occupation.

c) What guidance was considered in the design of these wards?

A. Whatever was stated in the ER's and agreed by users, who my staff informed me were fully involved in the design process.

d) Which staff informed you?

A. From the project team those working with the Children's Hospital user groups were Mairi McLeod Children's Project Manager, Morgan Jamieson Children's Project Medical Director, Fiona McCluskey Project Nurse, Jackie Stewart consultant Nurse Infection Control, Frances Wrath Boards ASR Project Manager, Capita and employees of the contractor's team (Construction, Designer, health Planners etc.

e) What processes were in place to ensure guidance compliance?

A. As described already, COSs from users approved by clinical and managerial leads, user groups (including their own service infection control staff and the infection control central team) design meetings regarding RDD process with members as described above, service directors sign off in stage 2 and Capita to check compliance to ER's throughout the design, testing, commissioning and validation processes. Post selection of Brookfield during stage 2, designs were further developed for all parts of the hospital at a series of 3 meetings per user group (including wards 2A 2B) attended by NHS project managers Heather Griffin, Mairi McLeod, supported by Frances Wrath, Fiona McCluskey (nursing), Jackie Stewart (IPC), Karen Connolly (FM), Wallace Whittle, C&B, Capita and others depending on the issues being discussed. Designs were discussed, drawings updated and submitted for vetting A-D. Those vetting gave a ranking in the discussion with the team and signed off functionality to that ranking. As there were probably over 10,000 drawings in this process no one person could take on the task and the team as above undertook the vetting function although it was led by Frances Wrath, who provided the most input.

All design meetings were minuted by Brookfield's Design Manager and notes on discussion and actions loaded onto Aconnex for the record and clarity. Updated drawings would be uploaded prior to the next meeting for review by the NHS team and shared with the user groups. Prior to conclusion of the process in Autumn 2010 all Service and Clinical Directors from both the Adult and Children's Hospitals had to meet with their teams who had been involved in their departments design development and sign off the design or not. Don't remember any of them not being signed off. I had a regular meeting with the Children's Hospital senior team to get feedback or address any issue that may arise, don't recall anything that could not be resolved.

f) Were there any changes to the design during the design and build? If so, please describe any such changes, describe the impact, if any, on guidance compliance, and described the sign off process for any such changes, your involvement and how any changes were communicated to the Board. Was external advance ever sought in respect of design changes?

A. Don't recall any changes and certainly don't recall being advised of any non-compliances during the design period. However, when I was asked to attend meetings with David Loudon and Robert Calderwood CEO in 2016 nearly 3 years after I had retired about ventilation in general single rooms, someone brought up an issue about 2A design performance of isolation rooms (PPVL rooms). I asked what was the issue and David Hall indicated that Brookfield and ZBP had made some changes to the design but stated he was assured by them that it was still in compliance with guidance. This subject was also brought up at the Independent Review process led by Doctors Fraser and Montgomery but we didn't have any real detailed discussions on it. There was also a communication between Brookfield and Wallace Whittle in 2015 whereby Wallace Whittle confirm that the design is compliant. I was also made aware in 2016 or maybe 2019 (just prior to the independent review) that Peter Moir had the PPVL rooms commissioned twice, I would have expected that to have addressed any outstanding issues.

g) Describe the IPC involvement in the design of Wards 2A and 2B, who was involved and who signed off the final design and when.

A. The final design would be signed off by Brookfield and ZPB the hospital designers, the people responsible for design, construction, completion and compliance. The design development would be assisted by the project team led by Frances Wrath and Capita and users (including IPC) during the RDD process as previously described and given a ABCD status by either Frances Wrath or Capita. This would then be installed, tested and commissioned by Brookfield and Mercury Engineering and any specialist commission consultants (H&V I have been told) they employed and then the performance and installation approved by Capita for the Board. For specialist rooms in these areas the Board should carry out its own separate validation process (for example theatres, PPVL rooms) with IPC and ICD fully involved, in fact

they should be leading it. And again, as above I was informed these rooms were commissioned twice by Brookfield under the instruction from Peter Moir, hence, if there were issues at first commissioning, I would have expected them to have been picked up at the second commissioning before patient use.

h) What concerns, if any, did you have regarding the final design specification of Wards 2A and 2B, and what action, if any, did you take in respect of these concerns?

A. I don't remember any concerns and do not recall anyone raising concerns. Also, for these rooms, their performance should be validated prior to any patient use.

Isolation Rooms

49 Describe how was the number and location of isolation rooms agreed? Who approved the final number and locations in the QEUH and RHC?

A. All isolations rooms (type, quantity and location) would be at the request of the users and instructed to the project team and signed off by the users in conjunction with infection control personnel, supported by the TA's Health Planners (Buchan Associates) and the architects (Nightingales) and contractor health Planners Tribal, during the design process. No one else other than the users could make the decision about how many isolation rooms were needed other than the users. This is because the number of rooms, especially critical rooms with high ratio of clinical staff, are directly proportional to the revenue cost of running a department or the whole hospital, therefore, this decision would only be taken by the users themselves, no one else. These individual rooms would then be included in the Schedule of Accommodation (SOA) and finally approved by the Service Directors and their management teams including their Clinical Directors in the Autumn of 2010.

Both the Adult and Children's Hospitals had a process set out and agreed for approving this with the Board. Regarding the SOA, there was an earlier version compiled when I arrived in 2006 by the first set of TA's, Davis Langdon and Health Planners, Directions, and this may have been used as a basis for moving forward, but only the users and their senior management team could sign off the number of rooms, mainly because it is a huge driver of revenue costs, as well as clinical need.

50 Who was responsible for producing the drawings and the specification for isolation Rooms; who approved these from the GGC Project Team?

A. Brookfield and ZBP only for the drawings and design and Capita for confirming compliance. No one from GGC approved these drawings as I recall.

51 What concerns, if any, did you have regarding isolation rooms and compliance with SHTM/HTM? What action, if any, did you take in respect of any such concerns?

A. None. I don't remember being made aware they were non-compliant, if indeed they are. As stated in correspondence between Wallace Whittle, Brookfield and the NHS in 2015, Wallace Whittle state they are compliant.

a) Which correspondence are you referring to?

A. An email exchange between in the first instance between David Wilson, Brookfield and Mark Harris, Wallace Whittle in June 2015 and subsequently sent onto to Ian Powrie NHS and David Hall C&B.

52 The Inquiry has reviewed the RDS in excel format and note there is an entry under ‘Design Notes’ relating to Ward 2A isolation rooms, the entry states: WARNING NOTICE: This room is based on a theoretical design model, which has not been validated (see paragraph 1.8 of HBN 4 Supplement 1). Specialist advice should be sought on its design. The lamp repeat call from the bedroom is situated over the door outside the room.

a) Was this note entered on the RDS? If so, why and by whom?

A. Firstly, what part of the isolation room are you referring, there are three parts to an isolation room, hence, 3 RDS’s, patient room, lobby and ensuite, was it on all three rooms? I do not know if entered or not on RDS but generally RDS’s fully managed and updated by the architects, Nightingales named on the RDS form and all items discussed with ZBP and Brookfield. There will have been a number of iterations on the RDS’s from start to finish and my question would be, is this stated on all versions of them or removed after being actioned? I would say this is a question for those working with the detail of RDS’s such as Frances Wrath and Capita and Nightingales, ZBP and Brookfield.

b) What specialist advice was sought relating to the design of these rooms?

A. Advice given to user groups, project team (including infection control) by Brookfield, ZBP, TA (Wallace Whittle) and Capita during the RDS process as describe above. Did any of them seek further advice in their design development, you will need to ask them, the contractor did use specialist advisers on certain aspects of the works. This part of the design process would be during the stage 2 process in 2010 all minuted by Brookfield with marked up drawings produced (all stored on Aconnex) and NHSGGC should have copies of all this via Frances Wrath.

c) What was the final agreed design for isolation rooms and who approved this?

A. I do not have this information (it is a whole series of drawings and comments!!!) and as I stated previously it was all captured by Brookfield with all the signed off drawings and approving staff, Frances Wrath should have retained an NHS copy. This would be given a status (ABCD) by Frances Wrath and or Capita, probably Capita, Brookfield, ZBP and Mercury would then take forward to construction bearing in mind it is still their responsibility for compliance. If this changed in the ongoing design process after December 2010, then there would be a Compensation Event or PMI raised. These rooms should be approved by NHS via Capita as compliant and validated by NHS (i.e. IPC and ICD) before patient use. These rooms would also need the NHS to obtain separate validation certification to test their performance against guideline requirements.

53 What ceiling types were specified and approved for use in isolation rooms? Who from the GGC Project Team approved this? Describe your involvement, if any? What was the impact, if any, of the choice of ceiling tiles? What concerns, if any did you have regarding the choice of ceiling tiles?

A. Again, I do not have this detail, it will be on Aconnex and NHSGGC should have a copy. As stated above, Brookfield would make a proposal and it would go through the RDD process (with users, Infection control, Capita and project team led by Frances Wrath). For a building element like this, probably discussed in the process with Peter Moir and David Hall and compliance checked by Capita.

Handover prior to retirement and retirement

54 The Inquiry understands that you retired from the role of Project Direction in July 2013, at which time Mr Loudon stepped in to the role of Project Direction.

a) Describe the handover process, if any, between you and David Loudon when you retired from your role of Project Director.

A. As I remember it, David started a month or so before I left which I think had been agreed as part of his appointment to his new role, although I think he took holidays during this period. He spent time with me and the project team and was invited to a range of meetings we thought appropriate. He spent time with project team members, the contractor staff and advisory staff, some of whom he knew well because he had just left Currie & Brown to take up this role and he had visits to the new hospital site. Peter Moir was the project manager for the contract who would be the conduit for the transfer of me leaving and David taking over and, hence, it was important they had time to strike up a relationship, hence, they had some sessions together. David was also employed in a dual role as Facilities/Property Director for the Board and he spent some time with his other new colleagues as well and also with corporate HQ staff where he would eventually be part of the senior leadership team. We had individual conversations about the project and I think I had compiled a folder of information for him.

b) Please confirm how long the handover process was between you and Mr Loudon; how was the terms of your handover recorded and where would records of these handover discussions and arrangements have been kept. What information was transferred between you and Mr Loudon during the handover process?

A. He was based in our offices which were on the site for a number of weeks, say 3/4. There were no terms of handover set out by the Board to me as I remember, only an instruction to give him as much information and familiarisation as possible from the CEO and it was thought this would best be achieved by him buddying me and other members of the project team in those final weeks of my time on the project. I do not remember if the Board had organised a formal induction programme for him or not but we gave him as much support and induction as we possibly could. Please understand that at

this point in time I was supposed to be working only one day per week as part of my readiness to retirement process after more than 40 years of working (part of my terms & conditions) and I was actually working 5 days plus per week. The project team, the advisors, Capita and the contract manager were still in position to inform and advise him after I left. I don't remember specifically recording what we did with David although all the meetings he attended with me and others would be in our diaries if still available and anything I recorded would be on my computer. Meetings he attended would be in the meeting notes which the inquiry probably have these already but sure the NHSGGC would be able to provide them if not.

c) What concerns, if any, did you raise with Mr Loudon regarding the water and ventilation system?

A. I wasn't aware there were concerns when I left in 2013.

d) What information, if any, did you provide Mr Loudon regarding the ventilation derogation as provided for in the M&E Clarification log? What advice or information, if any, did you provide Mr Loudon with regarding the ventilation derogation?

A. I don't recall what information I gave David. However, the derogation you refer which was decided at bid stage wasn't mentioned as I remember. There were no concerns raised about the derogation since 2009 and we were all too busy getting on with the current work load which was substantial. He was invited to review notes, meeting minutes, all office files. meet with the project administrator and have access to all contract documents, Aconnex, along with the folder I left him.

e) What information, if any, did you provide Mr Loudon with regarding the proposal at the time to accommodate the BMT patients from the Beatson at the QEUH/ RHC campus?

A. I wasn't dealing with that but he would have heard the debate at some of the meetings he attended. Peter Moir would have briefed him on all current issues including BMT, He may also have been briefed on BMT by his new colleagues in the senior leadership team including the CEO who was the officer he reported too and Jenifer Armstrong, who was the proposer of the BMT change and who would become one of his close working senior colleagues.

55 **Refer to Bundle 12, document 104, page 813.** Following your retirement the Inquiry is aware of you sending an email to Douglas Ross, David Loudon, Peter Moir, Heather Griffin and Shiona Frew, subject matter 'Re: QEUH – SBAR Room Air changes'. This email you sent was in response to David Loudon's email of 21 June 2016 at page 816 of Bundle 12.

a) When did the Board accept derogation to the 3 air changes per hour?

A. Refer 31.

b) In your email at page 813 you state 'no matter what the infection control people say, they were involved in every aspect of the design and the member of the team responsible for infection control, Annette Rankin was the person responsible at design…'

Who signed off the design change from infection control? Annette Rankin has given oral evidence to the Inquiry during the Hearings commencing 20 August 2024 advising that 'she definitely was not asked to facilitate the provision of advice about whether it would be appropriate to have natural ventilation in this hospital.'

A. I think at the time, nearly 10 years ago I.e. 2016 meeting, what I mean in my email is that we were all involved including infection control (Annette in the earlier part of the process then Jackie Stewart latterly) through the whole process pre and post tender and like all other services areas (i.e. Estates, FM, IT, Physics, Bio- Engineering, Labs, finance clinical etc.) the process was set up as a hub and spoke process (not set up by me by the Board) whereby people in the project team and the wider evaluation group etc. had a responsibility to

connect with their own departments/functions and share information and feedback to the group about any concerns they may have. I did this myself with my own department and superior as did every other individual in the project team.

This is also not the first time in my career that infection control staff have changed over time and then not agreed with decisions their colleagues have been party too previously. From David Loudon's email we have an SBAR which is challenging the 3 ACH's from infection control staff (different infection control staff than from my time) suggesting/assuming that infection control hadn't been involved in this issue from my reading of it. It also states this air change rate was copied across from dialysis this is incorrect. What I am stating is that in my opinion infection control were involved like all the other functions and were party to the debates and raised no issues and as previously stated in this statement this was the only project I knew of which had an infection person attached to the project so we actually thought we were doing something very positive.

At the follow up meeting to the email, I expressed my comment again about infection control's involvement in the process when responding to Dr Armstrong's stating at the meeting that her infection control staff were saying they weren't involved. Therefore, for the sake of clarity, I am not meaning that Annette signed off the 2.5 air change rates or the sealed building or rejected natural ventilation personally but that she and others had been party to the debate in her role, like all others in the project team, she was to raise issues if she felt the need and share with colleagues and then feedback any queries or concerns. In my opinion we were all aware of the information available because Mark Baird (TA) took us all through it more than once, and I think the Clarification Log (during the evaluation/preferred bidder time period) showed 2.5 air changes per hour in general single rooms in those presentations from Mark which was subsequently changed to 40L/S through continued discussion, with nursing medical and infection control and the TA's , hence, in my opinion we were all aware of our professional advisor's recommendations to accept this change with no issues raised by them regarding infection control and I don't

remember anyone else raising any issues and they were free to do so. Infection control, including senior staff were aware of Peter Hoffman's comments in the email already referred to in this statement at question 30 a).
The inquiry team should note the massive task we were undertaken over that period of time and the enormous amount of information we had to cope with which was considerable, probably more than most of us had had to deal with at any other time in our NHS careers.

Regarding the question on natural ventilation, I thought I had cleared this up at a meeting in 2016 three years after I retired but it is a long time ago now. There was discussion on natural ventilation proposed by the Boards energy advisor Susan Logan and I am sure she will confirm that it was infection control staff who wanted a sealed building with mechanical ventilation and closed that down. My comment in the email is incorrect in that my final discussion on this was with Penelope Reading sometime in 2010 where she was asked about considering natural ventilation to the general ward rooms to gain some fresh air and adding to the air changes (which would have caused design changes to be made but we had the resources to do that). I think, this occurred with Wallace Whittle after a Lab project meeting (which we attended) and Penelope Reading questioned the advisors whether or not it would be possible if there were openings in the building for natural ventilation within the single rooms, could infection travel from one room to another? The TAs advised it would be an unlikely event but they could not give a guarantee this could never happen and the issue was then closed out, never to be mentioned again.

c) Who then was responsible at design from infection control?

A. The contractor and their designers employed as hospital specialist contractors in terms of providing best practice in building, in discussion with the project team as set up by the Board where infection control issues were considered and related to other infection control staff by the IPC member of the project team supported by Nursing, Medical Directors, FM, Estates, TA's and Capita and any actions raised or queries fed back and addressed. In all previous projects I have ever been involved with in the NHS, where there was no infection control representative on the project team, then myself or another project team member would have had to fulfil that role and liaise directly with infection control colleagues for advice or decisions to be made.

d) If advice was sought from infection control how was this advice recorded and where would it be stored?

A. Any feed back to the project team and decisions made would be recorded in minutes, on Aconnex as part of the design process, or in the Logs.

e) Please explain in further detail the rationale for the position you have adopted in your email.

A. Not sure I know what is meant by my rationale regarding my position, I didn't have a rationale as is suggested, I was retired, wasn't employed by the Board or anyone else and giving up my time trying to be helpful in responding to the Board by providing information in the email and at the meetings. As set out above, I was concerned that it was being suggested that infection control staff were never involved, which is not the case. However, hopefully I have now explained my email.

f) Please confirm whether a meeting took place following this email, whether the meeting was minuted and what action, if any, was taken following the meeting?

A. Yes there was a meeting, in fact two meetings. Both had minutes taken as I recall and David Loudon set out an action plan for staff which he copied me into. I do not know if all the actions were all concluded as the final version. What I received from David was version 2 and this version still had outstanding actions and I never received an update after that or a final version, hence, assumed mitigating actions had been successful.

g) Do you have a copy of this email and if so are you abler to provide same to the Inquiry?

A. It's an email with the actions attached from the meeting and I will provide them to my inquiry liaison person.

Taps

55 Describe your involvement, if any, in respect of the decision to use Horne taps.

A. As I recall from so long ago, Brookfield were endeavouring to identify and purchase the taps required for the hospitals. I asked Ian Powrie to get involved and give me his view on the best Tap available. I think there were three taps identified and one was Horne, I remember that manufacturer's name because in my time in NHS Horne products were well used, I don't remember the names of the other taps being presented. Ian updated a group I set to consider the best taps to purchase (Peter Moir, David Hall, Jackie Stewart and Fiona McCluskey) and gave his view of the three taps. I recall he wasn't sure which was the best to select and I'm sure he told us that the one he preferred (not the Horne) wasn't compliant with regulation but can't remember the detail. One of the other two taps being considered he didn't like (can't remember the reasons) and the Horne tap which I think he said was fully compliant but had a higher maintenance regime than the others although I recall positively he advised that in terms of disruption to clinical service, if there was a problem with this Horne tap and it need repaired or if it needed planned maintenance it could be easily removed from service and replaces within minutes without turning the water off,

i.e. very effective in busy clinical areas and I remember Fiona and Jackie were please about that.

I asked if there were others to consider and he respond no so I then asked Ian, Fiona and Jackie to do some research and risk assessment to try and make a selection which they did and I think they or one of them produced a paper on it for consideration showing that the Horne tap was the best of the three and most suitable for use. As part of the assessment they got in touch with other NHS establishments including HFS, Vale of Leven Hospital and I also contacted HFS, can't remember who but they directed me towards David Browning, Estates Director at Lanarkshire Health Board who they advised was the best source around to get advice from (think because Monklands Hospital had had many issues with legionella over the years and he had been involved) and I subsequently did that. In fact, I took Fiona along to see David at Monklands Hospital (don't think Jackie went on the visit) and asked David his view. He immediately went into a store cupboard adjacent to his office and produced the very same Horne Tap we were considering and told us this was the best and only tap we should consider using.

I think I was told by one of my staff that Yorkhill Hospital used this tap in some areas as well. There was contact with Belfast as advised by HFS because of an incident there in a Special Care Baby Unit and I think Fiona and Jackie had a conversation to ensure we were getting all the information we needed. I think it was to do with Pseudomonas infection (that was the first time I remember hearing about Pseudomonas) and we took on board their advice. The assessment was completed and the Horne Tap was chosen as a fully compliant tap and most appropriate available. As part of Ian's remit to build a maintenance resource target for future service he would need to take any additional maintenance costs into consideration when making up his final resource plan. I was subsequently informed that in June 2014 (a year after I had I had left) this was revisited by a large group of stakeholders chaired by HFS and they confirmed, that at the time of selection this Tap was fully compliant and indeed the group made a decision to stick with it and not to change it.

a) What concerns, if any, did you have regarding the use of Horne taps?

A. After the assessment by Ian, Jackie and Fiona and discussions with HFS and after speaking to David Browning and others there were no concerns to consider, as I can remember.

b) What risk assessments were carried out in respect of the use of Horne taps?

A. As above.

c) Who was involved in, and who signed off the use of Horne taps?

A. Ian Powrie, Peter Moir, David Hall, Fiona McCluskey, Jackie Stewart, David Browning and HFS. The final sign off would have been completed at one of our Early Warning meetings and that would probably mean myself or Peter signed it off, probably me taking account of my involvement as stated above. This was not taken to the Board.

56 Is there anything further that you want to add that you feel could be of assistance to the Inquiry?

A. During the period I was Project Director at NHS GGC, New South Glasgow Hospital (NSGH) project there were many other associated tasks to be fulfilled which are not obvious from the question and answer statement process I have participated in to produce my statement to the Inquiry. Therefore, I am taking this opportunity to endeavour to inform the Inquiry about some of the associated requirements and significant additional activities necessary to complete a project of this scale and complexity in order to try and inform them of the significance of the task and effort involved in this major project. Therefore, the following is additional information I want to submit to the inquiry in order to provide some context and scale of the work I undertook during my tenure as Project Director.

My question sets from the Inquiry have mainly focussed on activities between the summer 2009 and December 2009, i.e. the period when the project was going through competitive dialogue, evaluation of bids, selecting and working with the preferred bidder and signing stages 1 and 2 of the building contract. This period is focussed on by the Inquiry primarily because it is part of the timeframe when the derogation for reduced air changes in the general single rooms was being discussed and generally agreed. During this period, I had to rely heavily on the NHS GGC appointed Technical Advisors leading and closing out all activities post evaluation including all technical aspects of the project and including the single room ventilation derogation relevant to the procurement process to arrive at an agreed position with the preferred bidder as there were many other tasks and activities I had to fulfil and the timescales which were set were very challenging.

There were many meetings, workshops, discussions and correspondence to be addressed with the Health Board, Government, City Planners, SPT, Scottish Power, CAA etc. and other internal and external stakeholders as further detailed below, not to mention the time and effort in providing feedback to those unsuccessful bidders (substantial piece of process and content), one of which was threatening legal action which had to be addressed in very tight timescales. At the same time as the procurement exercise the main focus and issues taking up much of my time was continuing to lead the process of design development for the Laboratory project which was another major element of the redevelopment of the Southern General Hospital site. This project was tendered as part of the overall packages of work (stage 1 in contract) but unlike the two hospital projects the design did not stop at the bid stage in mid-summer 2009, as it did for the Hospital's, the design of the labs project was instructed to continue (different design team) to the next level of design i.e. from RIBA stage D to RIBA stage E. This was because the Labs project was planned to start on site in the January 2010 only months away and indeed Brookfield started ground works on the site in December 2009 (pre contract approval at their own risk) and this in itself took a lot of organisation on my part to enable this work to commence.

The laboratory project was a substantial undertaking at 25,000 m2 valued then at circa £125M including equipment (£250M at today's prices) and it also housed the Glasgow's Mortuary services, again another key stakeholder to be involved with this aspect of the development of the site. I was fully involved trying to complete and close out all this associated work for the laboratory project during this period.

Also, within this same period of time, I was interacting with relevant parties in preparation for the construction of a new 33,000-volt substation to be constructed for servicing the new laboratory and the Hospitals (i.e. contract stage 1 January 2010) and very much time critical for the whole project, again another substantial piece of infrastructure to be planned.

Additionally, i.e. before the end of 2009, I was heavily involved in leading the planning and preparation for the re-siting of the Southern General Hospital Emergency Helicopter Service which was required to be moved because of the construction works for the new laboratory building, although the helicopter landing pad wasn't on the same site as the Lab, the works, (mainly Cranes) would affect helicopter operations and, hence, planning alternatives was time critical which entailed a huge amount of input from me to find and negotiate a base for this critical service to continue.

Subsequently, during the design and construction stages of the new laboratory and hospitals i.e. from January 2010 onwards, there were many other associated works and process I needed to undertake, lead or be involved with which took up significant amounts of my time (along with others in the project team) which were very necessary for the successful operation of the new facilities, these included amongst other things:

- undertaking major demolitions works on a major operational acute site, relocating the Scottish Ambulance Service's Glasgow Base from the Southern General Hospital to another two sites and preparing and completing works on these sites for the successful transfer of this critical service;

- Providing two new water mains services (fully independent of one another) from North and South of the River Clyde to provide good resilience to the new hospitals and laboratory facilities along with major reconfiguration of the hospital's drainage system;
- Very significant works which entailed re-diverting the blue light emergency route within the existing hospital and associated critical logistical issues to be addressed including, building a new temporary road system in one of Scotland's busiest Hospital emergency service sites;
- Planning, procuring and building two new multi-storey car parks, a new office building (for clinical staff), a Teaching and Learning Centre and a Clinical Research facility with Glasgow University, a temporary staff canteen building to be constructed then deconstructed when the hospitals were complete.
- Supporting the team at Ronald McDonald House to relocate from Yorkhill to the Southern General including significant involvement in the relocation and site selection and dealing with difficult contractual and legal issues to be addressed and resoled to achieve this transfer;
- Undertaking major infrastructure service change prep works for new hospitals including, re-siting two critical pieces of hospital infrastructure i.e. re siting the high voltage substation feeding the fully operational critical care unit and the theatre suites ensuring absolutely no service disruption and, re-siting the main oxygen plant (VIE) suppling nearly a thousand operational beds again ensuring no disruption to critical life support services;
- Completing traffic management assessments for city planners and negotiating and agreeing car park provision for the site in conjunction with negotiating with the council on section 75 agreement/requirements;
- interpreting with advisors many service site surveys to enable major infrastructure connections and working with SPT to determine the Fastlink-Service configuration to the hospital site from the city centre; and
- many inputs and discussions with the city planners in all things regarding the final appearance and materials to be used in the new Hospitals and associated works.
- Before I retired, I played a significant role in supporting the work of planning the migration of services into the new hospitals and Laboratory.

All of the above work entailed financial, legal, clinical, and service planning and involvement from me with staff and internal and external stakeholders including working with other organisations such as, Council Planning, Scottish Ambulance Service, Architect & Design Scotland, SPT, CAA, CLO, Scottish Government, public meetings and workshops. I was also required to play a significant role in community engagement and community benefits programmes. The timelines to deliver the project were set and agreed by the Scottish Government and the Board and they were to say the least very challenging.

I have answered the questions put to me by the inquiry team to the very best of my recollection, but without access to my past communications, emails, diary information and other documents covering my involvement on the project spanning 7 years with my last involvement in summer 2013, it is an extremely difficult undertaking. Without access to the relevant information, it's unreasonable to expect a fully accurate account of my involvement and any errors, inaccuracies or inconsistencies in this statement, and in any statement I may have given to others, is due to the passage of time and lack of my personal information on the project being made available and should not reflect on either my credibility or reliability.

Declaration

I believe that the facts stated in this witness statement are true. I understand that proceedings for contempt of court may be brought against anyone who makes, or causes to be made, a false statement in a document verified by a statement of truth without an honest belief in its truth.

The witness was provided with the following Scottish Hospital Inquiry documents for reference when they completed their questionnaire statement.

Appendix A

A40241860 - Item 03 - Minutes July 2013 - to be bundled

A47069198 - Bundle 12 - Estates Communications

A47851278 - Bundle 16 - Ventilation PPP

A49342285 - Bundle 17 - Procurement History and Building Contract PPP

A48235836 - Bundle 18 - Documents referred to in the expert report of Dr J.T. Walker - Volume 1 (of 2)

A52491934 - Bundle 43 Volume 2 - Procurement, contract, Design & Construction, Miscellaneous Documents

Appendix B

N/A

Appendix C

Alan Seabourne – CV and Professional Background

I started work as an apprentice Mechanical and Electrical engineer in 1964 after I left school. After my apprenticeship was completed in 1968, subsequently, I worked as an Engineering Supervisor in a plastics manufacturer until 1980.

I joined the NHS in 1980 and worked there for 33 years. I started as an Estates Officer in 1980 and moved through the levels of management to become a Health Board Director in Argyll & Clyde Health Board in 2005.

I worked for two Health Board's in my time, Glasgow and Argyll & Clyde.

From 1980 until 2000, I worked as an Estates Officer, Senior Engineering officer, Works Manager, Estate Director, Operations Director and from 2000 until 2006 senior manager mostly managing clinical services in a number of roles including Director of Community Care, Health Board Operations Director, Integration Director (including being Chief Officer Royal Alexandria Hospital), Divisional Director (Chief Officer) Inverclyde Royal Hospital and Inaugural Chief Officer for the new Health and Social Care Partnership (HCP) in Inverclyde Council area.

From 2006 until I retired in July 2013 my role was project director for the New South Glasgow Hospital (NSGH) project.

After I retired from the NHS I have been a Non-Executive Director and Lay member on a number of Boards for different organisations.
In 2021 I returned to fulltime working for a year (fixed term) when I was asked to lead the development of the operational commissioning strategy/plan for the New Children's Hospital being constructed in Dublin for Child Health Ireland, the largest Children's Hospital in Europe when complete.

Non-Executive Director, National Paediatric Hospital Development Board (Ireland) - (12/07/2022 to current). Appointed by the Minister of Health, Ireland to the Board who have responsibility for overseeing the delivery of the New Children's Hospital, Dublin and associated projects.

Trustee and Non-Executive Director Lar Housing Trust (01/07/2020 – current). Provide governance, leadership and advice to the senior management team of Lar Housing Trust, a charity providing rented accommodation in the Mid-Market Housing sector in Scotland.

Director of Operational Commissioning Children's Health Ireland (2/3/2021- 31/1/22). Develop the operational commissioning strategy and migration plan to enable clinical and operational services to transfer from the old children's hospital's to the New Children's Hospital in Dublin when complete and commission Tallaght Hospital's Paediatric Emergency Care Centre (10/11/2021).

Lay Committee Member of Court, University of Glasgow (01/02/2014 – 31/01/2024). A member of a number of governance/strategic Boards overseeing the successful delivery of Glasgow University's £1Billion campus redevelopment.

Trustee & Non- Executive Director of Erskine Veterans Hospital (01/02/2014 – 28/02/2020). Provide governance, leadership and advice to the senior management team to support them in providing and developing a range of services to ex forces personnel.

Project Director – New South Glasgow Hospital Campus Development, NHS Greater Glasgow & Clyde - (02/06/2006 – 31/07/2013). Lead the Project Team tasked with developing and delivering the Adult and Children's Hospitals, Integrated Laboratory Facility, 33KVA Electrical Substation and other associated projects and enabling works on the Southern General Hospital Site. Some of these included, Clinical Research Facility, Learning and Teaching Centre, Clinical Administration Block, Multi-Storey car parks, Transport Hub, new off-site facilities for the transfer of the Scottish Ambulance Service, transfer of helipad off-site and major site infrastructure service changes, including, diversions and installations of critical services, temporary and new roads layouts and demolitions of old buildings. Responsible for the administrative and financial control of the project (including all associated works) and for staff resources.

Divisional Director (Chief Officer), NHS Argyll & Clyde, Inverclyde Royal Hospital, and simultaneously Inaugural Chief Officer Inverclyde Community Health & Social Care Partnership (CH&SP) - (10/05/2005 - 01/06/2006). Lead a multi-agency team to manage and deliver acute, community and primary care and Local Authority services in Inverclyde, with an emphasis on integrated working between the NHS and Local Authority and other partners, responsible for meeting national patient performance targets. Responsible for the management of financial revenue and capital and staff resources.

At the same time lead officer for the provision of laboratory services across Argyll & Clyde Health Board.

Director of Service Integration, Renfrewshire (NHS Argyll & Clyde) and Chief Officer for Royal Alexandria Acute Hospital, Renfrewshire - (02/04/2004 - 09/05/2005). Manage the delivery of acute and community health services in Greater Renfrewshire with an emphasis on service redesign and innovation to make a major impact on clinical performance by reducing delayed discharges to improve patient services. Responsible for the management of financial and staff resources.

Director of Operations - NHS Argyll & Clyde (02/01/2003 - 01/04/2004). To contribute to the overall strategic, financial and operational management of NHS Argyll & Clyde by providing business support to the corporate management team. The main aim of this role was to improve the performance and efficiency of service delivery by carrying out reviews to support change and improve effectiveness and efficiency with targeted investment across all Board activities.

Director of Community Care – Renfrewshire & Inverclyde Primary Care NHS Trust (01/04/2000 - 01/01/2003). Lead the development of a partnership framework between the Trust and three Local Authorities to deliver the governments community care targets and Joint Future Policy requirements. To make a major impact on reducing hospital blocked beds (Delayed Discharges) including innovations in discharge processes and to further develop working relationships with social work and responsible for managing the clinical re-provisioning programmes for Learning Disabilities, Elderly Mental Health and Adult Mental Health Services. Responsible for the management of financial and staff resources.

Director of Operations, Capital Planning & Clinical Information System – Yorkhill NHS Trust (01/04/1992 – 31/03/2000). Manage the delivery of all non-clinical services including, property management portfolio, hotel services, procurement, estates services, information technology, bio-engineering, capital projects, retail contracts, medical photography, staff accommodation, Health & Safety and administration.

Director of Estates - Yorkhill Hospitals (July 1990 - 31/03/1992). Management of estates services and capital planning.

Senior Estates Manager (Works) – Maternity & Paediatric Hospitals Unit (June 1988 – July 1990). Management of estate and capital services for 5 maternity hospitals and Royal Hospital for Sick Children.

Senior Estates Officer Victoria Hospital Unit – (July 1982 – March 1998). Managing estates services for buildings and infrastructure.

Estates Manager Argyll & Clyde Health Board (July 1980 - June1982). Management of estate services for buildings and infrastructure.