SCOTTISH HOSPITALS INQUIRY

Bundle of documents for Oral hearings commencing from 16 September 2025 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 50
Core Participants' responses to Provisional Position Paper 15 - Governance

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THE SCOTTISH HOSPITALS INQUIRY

GREATER GLASGOW HEALTH BOARD

RESPONSE TO PROVISIONAL POSITION PAPER 15

GOVERNANCE STRUCTURE WITHIN THE PROJECT TO CONSTRUCT THE QUEEN ELIZABETH UNIVERSITY HOSPITAL AND THE ROYAL HOSPITAL FOR CHILDREN, GLASGOW

1. INTRODUCTION

1.1. This document is NHSGGC's response to Provisional Position Paper 15 ("**PPP15**"). PPP15 concerns the governance structure within the project to construct the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow.

1.2. NHSGGC has set out some points of clarification in section 2 below. However, it is noted that PPP15 does not concern the present-day governance structure. It only considers the position up to 2021. The governance within NHSGGC has changed since 2021. A paper is in the process of being prepared by NHSGGC which will explain to the Inquiry the differences between the governance structure considered in PPP15 and the governance structure in place at the present time.

2. SPECIFIC COMMENTS

(i) Section 5. Governance and key events prior to 2008

2.1. The description provided at paragraph 82 is inaccurate. An alternate wording is suggested below:

By April 2004 NHS Trusts were dissolved and Community Health Partnerships (CHPs) were established. In May 2005 the Health Minister announced that it was the Scottish Executive's intention to consult on the dissolution of Argyll & Clyde NHS Board and that NHS Greater Glasgow and NHS Highland take over responsibility for the relevant areas in Argyll and Clyde. On 1st April 2006 the Argyll & Clyde NHS Board was dissolved with the Renfrewshire, West Dunbartonshire and Inverclyde parts of NHS Argyll and Clyde merged with NHS Greater Glasgow to become NHS Greater Glasgow & Clyde.

(ii) Section 6. Governance and key events in 2008, Sub-section "The Change to the Procurement Model", paragraph 114

2.2. NHSGGC wishes to clarify that in February 2008 Currie and Brown were not employed by NHSGGC.

2.3. Amongst others present at the workshop was a Davis Langon representative who had been the Technical Adviser preparing the Public Sector Comparator.

(iii) Sub-Section "Approval of the OBC", paragraph 138

2.4. NHSGGC wishes to clarify that a draft version of the OBC was provided to Mike Baxter on 11th January 2008. The Scottish Government CIG issued a table of questions to NHS GGC on 28 February 2008 which were responded to by NHS GGC on or around March 2008. NHS GGC is unable to locate the relevant correspondence but holds copy of the response to the table of questions (submitted along with this response).

(iv) Sub-section "The appointment of Currie & Brown as Technical Advisors", paragraph 140

2.5. The first sentence is not relevant to Currie & Brown's appointment. In May 2008 NHSGGC sought tenders for the appointment of a Lead Consultant for a Public Finance Route for the New South Glasgow Hospitals Team. Currie & Brown was subsequently appointed following evaluation of tenders.

(v) Sub-section "Changes to Governance Structures in 2009", paragraph 166

2.6. The description in this paragraph is inaccurate. The Project Executive Group (PEG) was disbanded in April 2008. The PEG was replaced by a smaller group called the New South Glasgow Hospitals Executive Board. The Procurement & Finance Group merged with the New South Glasgow Hospitals Executive Board following a joint meeting on 8th April 2009.

(vi) Section 7. Governance and Key Events in 2009, sub-section "Table of Bid Submission Clarifications", paragraph 228 -

2.7. NHSGGC is unable to clarify that the Bid Submission Clarifications document profiled as 151209 rev 2236 was circulated on 15 December 2009.

(vii) Sub-section "M&E Clarification Log and Clarification Log", paragraph 237

2.8. NHSGGC wishes to clarify that Mr Calderwood signed the contract for Stage 1 (Design & Construction of Laboratories) and Stage 2 (Design Development New Hospitals Building) with Brookfield Europe on 18 December 2009.

(viii) Governance Arrangements in 2010, paragraph 244

2.9. NHSGGC wishes to clarify that, in March 2010, the contract with Brookfield was for Stage 1 (Design & Construction of Laboratories) and Stage 2 (Design Development New Hospitals Building). Stage 3, to "construct" the new hospitals buildings, had not been signed.

10 July 2025

COMMENTS AND RESPONSES		
Department and Contact: Healthcare Policy		
Comment	**NHS Board Response**	**Scottish Govt. Use**
(1) The involvement process should be highlighted as exemplar of good practice and note the preference for mixture of single rooms bays with several beds.	Thank you for complimentary comment on Engagement for the New Hospitals. In planning terms we have found the contents of the "Tell us What You Think" document and New South Glasgow Hospital Engagement Report extremely useful.	
(2) Page 21 and 34 the OBC should include the latest projected population estimates for the 0 to 15 years which have changed significantly from 2004 estimates i.e. numbers of children not reducing as quickly as first thought. Would query if this has been built fully into projections.	The population predictions incorporated in the OBC in respect of the New Children's Hospital represent those which had been utilised thus far to inform the development of the bed model. Specifically the work undertaken in conjunction with CHKS utilised, as a proxy for demographic change, the GRO predictions for the NHS Greater Glasgow 0-15 population in the period to 2015 based on the available data at the time, namely the 2004-based predictions by administrative area (published December 2005). Based on this parameter, and an assumed steady hospitalisation rate, an 11% reduction in activity was predicted. This accounted for ⅓ of the overall bed reduction adopted (23 in-patient beds - equating to around 16 beds overall if a proportionate allowance is made for increased day case/short stay accommodation to support the shift to ambulatory care models). During the further development of the Outline Business Case there has been a clear recognition that changes in the birth and total fertility rates, as well as	

	migration, have begun to materially impact on population predictions, however precise accredited data from GRO has not been available until the publication of the 2006-based "Population Predictions by Sex, Age and Administrative Area" in late January 2008. These predictions show that the previously used parameter regarding the 0-15 population of NHS Greater Glasgow and Clyde now anticipates a fall of only 4%. It is however also recognised that: a. the work undertaken with CHKS used the Greater Glasgow population as a proxy for the overall activity of the hospital whereas, in practice, around 50% of admissions are from outwith Greater Glasgow and therefore from Health Boards subject to different population predictions (both larger and smaller). b. over 50% of bed days relate to children under 5 years which is the population group most immediately affected by the changing birth rate. Agreement was therefore reached with colleagues in the General Registrar Office during 2007 to undertake work, once the revised predictions by age and administrative area were available, to more precisely relate the latest available population predictions to the detailed case mix of RHSC by Health Board area and age group. This work was initiated as soon as the 2006-based predictions by administrative area were released (January 2008) and the output was only available in the last two weeks. This work has shown that in the period to 2014 there is almost no predicted change (around 0.1%) in the anticipated overall bed utilisation albeit there will be a shift in favour of patients under 5 with fewer in the 10-15 age group. Because the 2006-based predictions were not available until January 22nd 2008 – and the detailed analysis of our own figures even more recently than that – there has been no opportunity to amend the bed model utilised for the Outline Business	

	Case. Clearly the demographic changes do not exist in isolation since there are also issues of practice, efficiency and performance that are also subject to change over time. It is therefore intended that these matters, including the revised demographic predictions, will be subject to further in-depth review during the course of the coming months. It would be premature to anticipate the final impact on overall bed numbers but it is our clear impression that this would be at a level that would be addressed through the contingencies already incorporated in the OBC.	
(3) CHKS comparators included for benchmarking adult services. Would like to see comparable indices for children's services.	To derive/reconcile the baseline bed figures CHKS applied the average quoted bed occupancy rates for each specialty as indicated by the RHSC and the average of North & South Glasgow for other specialties (to capture the 13-15 year old population). See table below. Some specialties exhibit very low bed occupancy e.g. ENT 39.1% while a number of others indicate bed occupancy in excess of 100% e.g. Anaesthetics 112.6%. This may be a reflection on specialties with no allocated beds or outlying patients. Overall it was assessed that the current average occupancy of the RHSC was 74%. See table below.	

Quoted Average Bed Occupancy Rates 2004/05

Specialty	04/05 average bed occupancy
General Surgery	85.3
Urology	68.3
Trauma & Orthopaedics	66.2
ENT	39.1
Ophthalmology	101.9
Oral Surgery	101.1
Paediatric Dentistry	103.6
Neurosurgery	65.7
Plastic Surgery	67.8
Cardiothoracic surgery	40.1
Paediatric Surgery	66.6
Accident & Emergency	100
Anaesthetics	112.6
General Medicine	88.2
Gastroenterology	106.5
Endocrinology	108.5
Haematology (Clinical)	80.3
Rehabilitation	81.8
Cardiology	54.6
Dermatology	100.6
Thoracic Medicine	104
Infectious Diseases	75.5
Nephrology	60.6
Neurology	116.5
Rheumatology	104
Paediatrics	45.2
General Medicine	91.4
Dental Medicine	103.6
Gynaecology	47
Clinical Oncology	84.9
Radiology	100

	It should be noted that the above list of specialties are accommodated within 11 ward areas all of which have shared usage. The occupancies represent a calculation based on individual specialties activity patterns and not whole ward occupancy levels. Based midnight ward occupancy rates the average current occupancy is around 70%. **Target Performance** In general terms CHKS found that when compared as a whole with other Children's Hospitals the RHSC compared well and in some cases better that its peers. The table below profiles current length of stay & day case rates for each specialty along with the target rates on 2015 case mix and best peer performance (based on individual specialty services from within the range of 11 comparable hospitals). See table below.	

	TARGET		CURRENT	
Specialty	Ave L of S*	D C Rate**	Ave L of S	D C Rate
General Surgery	2.16	76%	2.33	56%
Urology	2.15	88%	2.16	72%
Trauma & orthopaedics	2.92	62%	3.16	44%
ENT	1.74	55%	1.76	47%
Ophthalmology	2.05	91%	1.89	83%
Oral Surgery	2.18	85%	2.22	81%
Paediatric Dentistry	1.21	90%	1.19	81%
Neurosurgery	6.59	59%	7.17	53%
Plastic Surgery	1.91	76%	2	71%
Cardiothoracic Surgery	4.92	27%	4.65	4%
Paediatric Surgery	3.99	78%	4.12	66%
General Medicine	2.01	82%	2.23	30%
Gastroenterology	5.29	79%	4.82	60%
Endocrinology	5.67	91%	6.49	84%
Haematology (clinical)	6.58	87%	7.34	79%
Cardiology	4.9	19%	4.91	10%
Dermatology	6.9	87%	7.07	71%
Thoracic Medicine	8.05	59%	7.85	17%
Infectious Diseases	3.65	95%	3.57	92%
Nephrology	5.34	89%	5.39	80%
Neurology	9.24	84%	8.86	43%
Rheumatology	2.57	88%	2.54	73%
Paediatrics	3.38	91%	3.54	81%
Gynaecology	1.2	88%	1.21	85%

* Average length of stay ** Day case rates

(4) Good description of national services. Would like to see clearer definitions for regional and secondary care services and associated activity.	Because they are more explicit and circumscribed the nationally designated services provided from RHSC Glasgow were described in detail in the Outline Business Case. With regard to regional services, RHSC is effectively the sole supplier of tertiary paediatric services (with a very few explicit exceptions – see below) to the West of Scotland Health Boards. The Department of Health Specialised Services National Definition Set – Definition Number 23 (www.dh.gov.uk/en/Managingyourorganisation/Commissioning/Commissioningspecialisedservices/Specialisedservicesdefinition/index.htm) identifies 25 different specialities or speciality groupings within Specialised Children's Services. All of these are provided at RHSC although some sub-sets within a few of these speciality groupings are not currently provided namely - paediatric neurosurgery (although straightforward procedures are undertaken at RHSC e.g. shunts) - scoliosis surgery - adolescent psychiatry - adolescent gynaecology It is planned that, with the exception of scoliosis surgery (national service in Edinburgh) and adolescent psychiatry (new build at Stobhill – opening 2009) these activities will all be accommodated within the New Children's Hospital. There are a small number of highly specialised and very low volume services which are commissioned from appropriate centres in England through National Services Division on behalf of Scottish patients (e.g. retinoblastoma; heart, lung and liver transplantation) which are not provided at RHSC or elsewhere in Scotland. RHSC offers the full range of secondary care services for children and young	

	people and the new hospital will be effectively the sole provider of secondary in-patient care for 0-15 year olds in Greater Glasgow. It will also be the principal provider of ambulatory and out-patient secondary care although elements of such care will also be accessed through Child Development Centres and Minor Injury Units and there maybe some emergent opportunities to utilise the two new ambulatory care hospitals, due to open in Glasgow in 2009, to host some elements of ambulatory care for children and young people nearer to their home base.	
(5) Limited information on what external NHS Boards are engaged and will be contributing to the exercise.	The Health Boards that the Project Team engage with are: Lanarkshire HB Forth Valley HB Dumfries & Galloway HB Ayrshire & Arran HB And our Paediatric colleagues in Clyde. This engagement has taken the form of a number of meetings with the Planning Teams from each of the West of Scotland Boards in early 2007. This culminated in a presentation to the West of Scotland Directors of Finance & Directors of Planning at the end of January 2007 and a further presentation in January 2008. The Medical Director and Project Manager for the New hospital are both members of the West of Scotland Child Health Regional Planning Group and the Chair of that Group and a member are members of the Project Steering Group for the New Children's Hospital. A West of Scotland conference looking at Regional Service Redesign issues was held in September 2007. Greater Glasgow & Clyde NHS Board Acute Services Division - Women & Children's Directorate has commenced on Service Redesign work. This will	

	inform the clinical design of the New Children's Hospital but many initiatives are likely to be introduced ahead of the build. One of the Groups that have been set up is the Regional Interface Planning Group. The terms of reference for this group is to agree the design of hospital paediatric services in the new children's hospital and how they interface with the West of Scotland regional district general hospitals children's units. Membership of this group comprises West of Scotland clinicians and managers and clinicians and managers from the RHSC. We have currently requested letters of approval in principle from the West of Scotland Boards and National Services Division. We have approval in principle from NSD and all the West of Scotland Boards:- Forth Valley, Ayrshire & Arran, Lanarkshire, and Dumfries & Galloway.	
Although 15%-16% of activity tends to be higher cost procedures and specialist end of healthcare economy.	We expect the financial impact of the adult hospital to be cost neutral. On the assumption of the current level and patient mix of patient activity the impact of the children's hospital is also expected to be cost neutral. However if there is a change from the current children's patient activity and mix there may be additional costs for West of Scotland Boards, clearly any change related to service development would proceed only on the basis of approval by relevant Health Boards. The next meeting between the West of Scotland Finance Directors and Glasgow Board representatives is due to take place on Tuesday 13th March 2008.	
(6) Would welcome more detail on children protection/patient security issues and how this will be managed especially in the context of mixed units single and multiple beds and recognised requirement for parents to have access to children as inpatients.	We are not at the design stage that would allow inclusion of information on patient security within the hospital, however, we will introduce modern security measures at the appropriate stage of design to ensure the safety and security of patients.	

(7) Note the commitment to discuss parent family accommodation with charitable organisations however would welcome more detail on how they are going to achieve this on congested site and lack of suitable hotel and other facilities in the area.	The Board are currently working with Ronald McDonald Family House Board to develop a joint plan to relocate the current Family House (situated adjacent to Yorkhill Hospital) to the Southern General site. At this stage both parties have agreed an outline plan on accommodation and identified a site on the Southern General Campus where the new Family House could be build (see Appendix 7, page 27 – purple area on drawing) As stated in the Outline Business Case all enabling and supporting projects to the new hospitals' development will have separate business cases, and will be subject to Outline Business Case Approval(s). The Board are also working with CLIC/Sargent who provide patient accommodation via apartments they have purchased adjacent to Yorkhill Campus. CLIC/Sargent intend to relocate near the Southern General Hospital to enable their services to continue. This work will continue if the Outline Business Case is approved. It should also be noted a new build hotel accommodation, with over 100 bedrooms, is now available close to the Southern General site.	
(8) Note that OBC would indicate that the capitals works would not be completed until the 1st quarter of 2013. Would query if this is significant and if further delays are anticipated.	The timetable to complete the building of the New Children's Hospital 1st Quarter 2013 sits comfortably with current assumptions. The issue regarding the dislocation of the Queen Mother's Maternity Hospital from the Royal Hospital for Sick Children in early 2010 has been addressed in our response to Question 21. At this stage there are no further delays anticipated although we are still working through our detailed procurement programme.	

Department and Contact: Chief Nursing Officer and Workforce Planning		
Comment	**NHS Board Response**	**Scottish Govt. Use**
(9a) There is considerable mention of new ways of working, service modernisation and multi-skilled and specialist workforce. There is little detail in the OBC on how the workforce implications are to be addressed. Can this be provided?	There is work underway in a number of our Directorates and CHP's to look at the way in which the workforce needs to change to address changing services. In the Women's and Children's Directorate to support the new maternity hospital and new children's hospital, work is underway to create Maternity Care Assistants at career framework Level 4, to free up midwives from providing elements of postnatal care. New posts of Advanced Neonatal Nurse Practitioners have been established who support senior medical staff. Similar work is also underway in Paediatrics. In the Rehabilitation and Assessment Directorate there are two pilot schemes funded by the Scottish Government Health Directorate. The first to look at establishing more skilled support workers to assist Allied Health Professional. The second to develop an advanced practitioner role to assist with assessment of patients with medical receiving. In Diagnostics, the 4 tier Structure in Radiography is already in place from Assistant Practitioners through to Consultant Radiographers. Work is also beginning to look at the competencies required in laboratories and the educational pathways required to create greater flexibility in accessing laboratory careers. In Pharmacy, work is underway to consider a role for a Pharmacy Technician.	

(9b) It would be good to see use of new roles template and also engagement with NES around this.	We work closely with NES and have recently put in place arrangements for a regular "strategic engagement" between the senior management team of NES and the Board. We will use the new roles template.	
(10) The business case states that there is integration with service requirements, bed requirements, affordability and the overarching workforce plan which supports the LDP. This is difficult to substantiate since the Workforce Plan for 2007 was never published and the draft versions had projections for nursing and AHPs but not for medical and any other staff groups. The projections for nursing and AHPs in the draft Workforce Plan for 2007 do not reflect reducing numbers as in the business case. This years Workforce Plan will not be published until April 2008. The draft LDP for 2008 has no workforce analysis for any of the HEAT targets.	Over the past year we have been developing our workforce planning activity to ensure that it is integrated with service planning. Workforce planning groups are established in each of our service areas. This will mean that the workforce plan to be submitted in April will reflect service requirements, bed requirements and affordability. A workforce planner is part of the Acute Services Planning Directorate and has been central to the development of the OBC. The projections for nursing and AHPs in 2007 did not reflect reducing numbers, in that the bed model which drives much of this had yet to be finalised. Similarly the financial plan to support the business case was also developing, and the workforce plan can now more accurately reflects the financial environment.	
(11) The business case would benefit from	The reduction of 2.6% in the nursing workforce represents around 300 WTE.	

a full analysis of the break down the nursing or AHP workforce although the appendix does provide a Christmas tree model of this e.g. what does a 2.6% reduction in the nursing workforce complement look like; how does the AHP workforce break down into Assistant practitioner, advanced practitioner and Consultant AHPs.	This largely reflects the reduction in the bed numbers, and would be across all grades. We continue to work on the profile of Allied Health Professions, building on the work within the Rehabilitation and Assessment Directorate. We have yet to complete our projections across the whole workforce but will be able to provide the details sought over the next few months.	
(12) • Is there a framework/model to address workforce issues linked in to national work on medical, nursing and AHP workload and workforce planning? (e.g. Nursing and Midwifery Workload and Workforce Planning Project)	The national workload tools are being used to predict our future workforce numbers, with Nursing and Midwifery Workload tool being used to test the professional judgement used to predict the nursing numbers for the new South Glasgow Hospitals.	
(13a) • What is in place to ensure flexibility to adapt workforce planning to the changing needs of the patient population (and workforce) over the next few years? (13b) • Is this reflected in the Project Plan?	Each Directorate has a workforce-planning group and our workforce plan will be continually updated. This is not reflected in our Project Plan – at OBC we have not got to this detailed stage but it will be part of the plan for the next stage, Stage 2. We are looking to	

	begin workforce adaptation during 2008/09, working through to 2014. Six years will enable us to plan effectively for the changes and discussions have already begun with the Trade Unions.	
(14a) • Significant economies of scale are mentioned alongside new models of working such as seven day working, how is it proposed to reconcile these two aspects (related to AHPs and Medical workforce)? (14b) • How is this transition to seven day working to be introduced and managed in groups who do not traditionally work over seven days?	We do not see these as being irreconcilable. We see seven day working improving efficiency in diagnostics and laboratories and the economies of scale will be achieved by operating out of fewer sites, and by purpose built modern accommodation. Improving technology will enhance our existing processes. The Board will be working with the Staff Association and Trade Unions in order to get and manage agreements regarding a 7 day working. In addition when recruiting, new starts will be contracted on the basis of 7 day working.	
(15) • There is insufficient information about the medical workforce to make comment apart from the direction of travel being in line with policy.	The medical workforce will reflect the numbers and profiles set out in Modernising Medical Careers. There is already greater efficiency in the system through implementation of Hospital at Night. The reduction in sites will enable us to achieve less onerous rotas and we will look to redesign the medical workforce as national direction evolves.	

Implications of Bed Configuration		
We note that the bed modelling proposes a reduction of over 100 acute beds in the South of Glasgow. (16) • Reduction in bed numbers potentially means increased pace of patient flows through acute care. Is this acknowledged in workforce planning?	(N.B. The 135 bed reduction is across the whole of Glasgow) Workforce plan has taken account of the increased flows which will impact upon ward staffing and diagnostics.	
(17a) • Within the OBC there is little mention of the acute service linkages with community care services and how the workforce requirements in acute services reflect this.	Within NHS Greater Glasgow and Clyde Acute Services and CHCP's / CHPs are working together to look at different ways in which the balance of care can be shifted with more people receiving care within their own home supported through GP and community nursing input. There are a number of areas of work focussing on how we can better improve care through Acute Services and community colleagues working more closely. The Collaboratives for Planned Care, Unscheduled Care and for Diagnostics established a programme of joint working where Acute and CHCP/CHP colleagues have been working together to improve the interface between primary and secondary care, streamline the patient journey and deliver the access targets. We will continue to build on this approach as we progress the programme to deliver the 18 week referral to treatment standard. With the new Long Term Condition Programme both acute and CHCP/ CHPs are working together to consider new ways of delivering patient care and further development of existing schemes, which look to maintain patients at home, through anticipatory care	

	models that seek to avoid admission and readmission as well as to support getting patients home earlier. As we prepare for the opening of the new Stobhill and Victoria Hospitals in 2009 a number of clinical specialty planning groups have been established involving representatives from the acute sector and from CHCPs/ CHPs. The role of the planning groups is to look at potential new patient pathways between primary and secondary care allowing a shift in care. This redesign work is integral to this the implementation of the Acute Services Review both in preparation for the new Ambulatory Care Hospitals at the Victoria and Stobhill sites but also sets the framework for the redesign of inpatient healthcare in Glasgow's acute sector in particular for the New South Glasgow Hospitals. The shape of the workforce will need to support this transition. Work is already underway to redesign the workforce in Children's Services to develop integrated children's teams bringing health and social care professionals together. Specialist paediatric staff, many of whom are already managed within CHCP/CHP's, will be further augmented from the acute sector as services develop further. We are at an advanced stage in looking at the role of Health Visitors in this model. The Long Term Conditions Programme will require a community based workforce which has the skills to maintain patients at home. This will require existing community nursing staff to acquire more specialist skills or for more specialist staff to be more readily accessible. We will continue to develop this based on the range of competencies necessary in line with the NHS Careers Framework.	
(17b) • We are very interested in how this work on shifting the balance of care progresses during the course of development of the OBC and	Point noted. Shifting the balance of care will be noted on the risk register. We will keep the SGHD advised of our work on shifting the balance of care.	

FBC		
(18) • We note the two options of 57% or 100% single rooms and we support and encourage a solution that bring the hospital to an appropriately applied single room configuration for the purposes of managing HAI risks.	Noted	
Transition Management of Workforce Reduction		
(19) We recognise that this is not necessarily an issue for the OBC, but would like to see early plans on how this transition is to be managed. We would like to highlight and recommend the need for workforce planning and clinical pathways management to be high on the risk register and matrix for this project.	Noted	
Department and Contact: Medical		
Comment	**NHS Board Response**	**Scottish Govt. Use**
(20) The OBC make numerous references	Please see response to Question 2.	

to the falling birth rate in Glasgow. Births have been slowly rising since 2003 and the most recent GRO projections (2006) are that they will continue to rise until about 2014. Given that the new builds come on line about 2010 this may not have a major impact on their projections but they may want to note that they have considered the more recent data.		
(21) There will be an interim period between the closure of the Queen Mothers (QMH) on its transfer of maternity to the Southern, and the move of Yorkhill in 2013. The OBC does not give a clear estim date for the maternity unit move but I understand that there will be a period of 2 -3 years between the two. Whilst not strictly part of this OBC, there is a need to manage this interim period and I would suggest that assurance is sought from NHS GG&C on this.	The new build Maternity at the Southern General Hospital (SGH) will be ready for occupancy late 2009/early 2010. At that time services from the Queen Mothers Hospital will transfer to SGH and the Princess Royal Maternity. The Old Beatson Outpatient Dept (at the Western Infirmary) will be the new location for West End Ante Natal Services. NHSGGC are currently working with clinical colleagues to agree a preferred model of service delivery during the interim period before RHSC moves to SGH site. Our plan is to have reached agreement on the preferred clinical model for the interim period by the Autumn of this year. The Women & Children's Directorate Associate Medical Director is leading this workstream in collaboration with clinical, managerial and staff side colleagues, and the community engagement team is feeding into discussions.	

Department and Contact: eHealth		
Comment	**NHS Board Response**	**Scottish Govt. Use**
(22) There is not a lot of detail about how IT is meant to support the facilities, beyond stating that the Board will take responsibility for this in the context of the wider GG&C IM&T programme. However at this OBC stage this may be appropriate.	Noted	
(23) A key statement is to be found in 10.3, that the project includes the provision, maintenance of structured wiring but that it will remain the Board's responsibility to support existing and to procure new application hardware and software through separate contracts. This approach is appropriate given experience elsewhere of transferring more than base infrastructure to PFI arrangements and the difficulties that fragmented information systems and applications have for the Board.	Noted	

(24) Nevertheless there will be effort and resource required to establish even existing GG&C IT in the new facilities. This is reflected in the reference to a need to invest in significant Information Technology (IT) infrastructure with appropriate functionality to support the reconfiguration of services and emerging models of care, which will be crucial to the successful implementation of modern efficient healthcare systems." (1.10). It is not clear where allowance is made for this though it seems likely that a sizeable part may be in the; • *Equipment costs as set out in the OB1 forms have been excluded from the value for money assessment on the basis that these amounts relate to Group 2– 4 equipment which the Board intends to procure under a public funding route, irrespective of the chosen procurement route for the main project, and so this has no bearing on the assessment of the 3*	Information Technology enabling and containment costs associated with the new hospital developments are contained within the current capital cost estimate. The cost of providing IT Systems and hardware will be met through the Board's annual capital resource limit and through the transfer of current IT resources. It has always been the plan to source and fund the IT system requirements for the New Hospitals separately from the OBC. There are a number of reasons for this – 1) The systems must be capable of delivering for all of NHSGGC inc the new ACH/ACADs and the new Children's Hospital. 2) The need for ongoing alignment to the National e Health Strategy. 3) The need for the bulk of the new systems to be operational in advance of going to the new hospital to ensure benefits are gained on day 1. 4) The Change Programme to deliver new systems catering for a Clinical and Managerial workforce rather than an Admin workforce has to be started much earlier than the New Build. To achieve this we are doing the following: 1) NHSGGC are a lead player in a consortium of Boards procuring a new suite of Hospital Systems (known as PMS) aimed at Health in the 21st Century. This consortium chaired by the COO of NHSGGC has been asked by the e Health strategy Board to lead for all of Scotland. Procurement will be complete 1st Quarter 2009 with implementation thereafter. 2) A solution for paperlite working in ACHs is underway and this will integrate with the above. 3) Over £40m has been secured in the Boards Capital Plan to procure and install	

options.	the above.	
Department and Contact: PFCU		
Comment	**NHS Board Response**	**Scottish Govt. Use**
(25) Details of the Planning conditions and Section 75 requirements and how they will be addressed, has not been included but would be helpful.	The Board's outline planning application, lodged in April 2007, was considered by the Development and Regeneration Sub Committee of Glasgow City Council on the 15th January 2008 and was granted consent subject to conditions and Section 75 Agreement covering a range of sustainable transportation measures. The consent includes 43 conditions and 32 advisory notes. The Council's conditional approval was then referred to Scottish Government who have reviewed and confirmed at 29th February 2008 that the application has been 'cleared' by them. Many of the conditions relate to sustainability, design quality, site master planning, environmental and transportation matters and it is the Board's intention to incorporate these aspects within the design brief requirements for the project. The proposed Section 75 Agreement includes a range of sustainable transportation measures including the preparation and implementation of a Green Travel Plan, a financial contribution to Clyde Fastlink, undertakings to improve existing public transport provision, implementation of a car parking plan and enhanced accessibility by walking and cycling. These measures and their financial contribution are currently under negotiation between the NHS and the City Council. The Board have made financial provision (c.£4.59m) within their cost plan (within planning contingency figure of £20.718m in OB1 Forms) to take account of these contributions.	

(26) References to "Treasury" as an explanation for "Public funding" should be removed.	Point noted – will be amended	
(27) There are a few references to "Scottish Executive" that should be Scottish Government	Point noted – will be amended	
Department and Contact: ASD 1		
Comment	**NHS Board Response**	**Scottish Govt. Use**
(28) Economic impact/construction costs: in the capital costs estimates: has consideration been given to capacity issues within Glasgow given that there are other major infrastructure projects due to deliver in 2014 - Commonwealth games & associated infrastructure – and any impact on cost?	We have taken advice from our Technical Advisors regarding the impact of the Commonwealth Games. Their view is that with the current credit crunch problems we are likely to see a leveling or slight downturn in the Scottish marketplace, but that this would be potentially clearing by the start of the NSGH Project. It is not expected that the Commonwealth Games in themselves will create a major capacity problem; the view of the Technical Advisors is that the project will remain of significant interest to the marketplace.	
(29) Section 9 - affordability assumptions – can the 0.1% adjustment be further justified?	This was a judgement, the basis for which is explained within the narrative. We now know that the actual % uplift for 2008/09 will be 3.15% which is very close to 3.1%. We could update our projections to base assumed future funding uplifts	

	on 3.15% if this is required.	
(30) Pay uplift – identified as a key risk - 2% seems very conservative - does this include incremental drift – or purely inflationary rise?	Purely general inflation……it is assumed that any incremental drift beyond 2008/09 where specific additional provision is made for the significant initial impact of Agenda for Change implementation, will be contained within base service budgets as has always been the practice within the NHSGG, now NHSGG&C.	
(31) Some typos etc – pg 24 – section 3.7.2 – "despite overall reductions in immortality" !	Point noted – will be amended	
Department and Contact: ASD 2		
Comment	**NHS Board Response**	**Scottish Govt. Use**
(32) The OBC details some major changes to the configuration of the workforce over the next few years. We would therefore expect these changes to be fully reflected in the workforce projections template that are due to come to Analytical Services Division in April. These projections are vital as they directly feed into setting training numbers for medics and	Noted	

nurses/midwives.		
(33) The optimism bias sheets in the appendix do not explain why the various factors have been mitigated the way they have. The explanation needs to be added.	See table below.	

NHS GREATER GLASGOW AND CLYDE
NEW SOUTH GLASGOW HOSPITALS PROJECT
OPTION 1A

4 March 08 Rev 2.0

REVIEW OF MITIGATION FACTORS FOR OPTIMISM BIAS CALCULATION - COMMENT IN BLUE

Mitigation Factor Calculation

Contributory Factor to Upper Bound	% Factor Contributes	% Factor Contributes after mitigation	Stage	Mitigation Factor
Progress with Planning Approval	4	2	SOC	Opened discussion with planning authority, some engagement
			OBC	Outline consent in place, with any Planning Conditions and requirements for Section 106 or similar agreements established, including any specific requirements of e.g. Environmental
			FBC	Full Consent in place. Judicial Review period passed.
Comment: Outline planning application to be considered by GCC DRS Committee on 15th January 08, conditional approval with Sect. 75 agreement expected.				
Other Regulatory	4	4	SOC	Degree of sign off from Fire Authority, HSE, transport authorities, local government etc.
			OBC	
			FBC	
Comment: Discussions in progress with Scottish Water, Core Utilities and Transport Scotland no show stoppers. Conditional approval from SNH, SEPA, SPT, A+DS, SEDD, Airport Safeguarding. Fire and others outstanding so no mitigation.				
Depth of surveying of site/ground information	3	2	SOC	Desktop study undertaken of own site.
			OBC	Investigations undertaken, historical records examined.
			FBC	Full survey of conditions, site services and topographics.
Comment: Desktop study on ground conditions complete, including review of site investigations undertaken around the campus over the last 30 years. Mining report has established no known workings in area. Ground conditions and water table known problem, pile solution and de-watering of basement and foundations part of design from SKM. Enabling works package includes for site survey and clearance works to remove stockpiled rubble and undertake full SI.				
Detail of design	4	2	SOC	Concept/masterplan/DCP
			OBC	1:500s agreed and selected 1:200s.
			FBC	All 1:200s in place, key 1:50s (depends on procurement route.
Comment: Design developed in line with NHS Estates Design Development Protocol for PPP schemes and includes 1:500 departmental relationship drawings for both hospitals at all levels and 1:200 layouts for 5 key departments within each hospital, developed in discussion with user groups. Detailed schedules of accommodation developed by healthcare planners along with draft clinical output spec's for some departments. Site wide development plan and campus development plan also complete. Level of design has enabled the QS to measure plant, lift and circulation space to assist with the provision of more robust on cost %.				
Innovative project/design (i.e. has this type of project/design been undertaken before)	3	2	SOC	
			OBC	
			FBC	
Comment: Design solution not considered innovative, podium and stack solution has been used before on many hospital projects throughout the UK and worldwide.				
Design complexity	4	2	SOC	This might include complex M&E solutions (requires further development)
			OBC	
			FBC	
Comment: Solution not expected to be any more complex than a modern hospital build today, height may add to the construction complexity.				
Likely variations from Standard Contract	2	1	SOC	No contract chosen.
			OBC	Yes/no with measurement of scale of variations
			FBC	
Comment: no variations to standard contract form anticipated..... to be avoided.				
Design Team capabilities	3	1	SOC	Previous relevant experience of individuals involved. Capacity
			OBC	
			FBC	
Comment: Design Team will be selected for demonstrable experience on large, high value and complex (phased) healthcare projects. Existing team have large project experience, maybe re-selectec				
Contractors' capabilities (excluding design team covered above)	2	1	SOC	Previous relevant experience of individuals involved. Capacity. Track record of delivery.
			OBC	
			FBC	
Comment: Part of evaluation process will require consortia to have demonstrable experience on large, high value and complex (phased) healthcare projects				
Contractor Involvement	2	2	SOC	Buildability. Opportunity to influence design.
			OBC	
			FBC	
Comment: Minimal involvement to date on buildability etc., bar networking on programme and cost/sq.m issues, therefore no mitigation.				
Client capability and capacity (NB do not double count with design team capabilities)	6	3	SOC	Degree of team in place with relevant experience.
			OBC	Full team in place for procurement.
			FBC	Robust implementation plan in place.
Comment: Project Team in place to prepare PSC and OBC, further resource required once into Stage II post OBC approval, resource plan being prepared by Project Team. Gateway 1 review outcome - no red, 5 amber, 1 green.				
Robustness of Output Specification	25	15	SOC	Definition of scope and extent of services. Degree of outstanding decisions.
			OBC	
			FBC	
Comment: PSC design, M&E prelim design, drawings and draft clinical specs started, plan to use BCR's and other related material / documentation developed for ACAD's as basis for NSGH project.				
Involvement of Stakeholders, including Public and Patient Involvement	5	3	SOC	Scope of stakeholders to be involved. Plan in place to engage.
			OBC	Implementation of Plan
			FBC	Involvement demonstrated.
Comment: User Groups involved with design and preparation of prelim output specs. Staff side sit on Project Board. Community Engagement have held patient and visitor events to feed into design requirements				
Agreement to output specification by stakeholders	5	3	SOC	Letters of support from clinicians, Trade Unions, staff groups, patient representatives/groups.
			OBC	
			FBC	
Comment: design and output specs at early stage, however clinical groups supportive of project and involved in design events to review PSC design and departmental relationships.				
New service or traditional	3	2	SOC	Assessment of how innovative/new service model is at national/regional/local level. Has this ever been tried before?
			OBC	
			FBC	
Comment: while service delivery will remain similar only in diferent location, re-design and overview of whole hospital strategy requires further work.				
Local community consent	3	1	SOC	Consideration of traffic noise/existence of protestors or pressure groups
			OBC	
			FBC	
Comment: Local community supportive of proposals for new hospitals, minimal feedback during consultation process for outline planning application. Gateway 1 report acknowleged high level input on community engagement.				
Stable policy environment	20	15	SOC	Degree to which new policy/standards are applicable depending upon which stage is reached.
			OBC	
			FBC	
Comment: PSC design cost plan accounts for 100% single beds, sprinklers and full mech ventilation. Not aware of other major issues in pipeline				
Likely competition in the market for the project	2	1	SOC	Degree project has been marketed.
			OBC	Evidence of market interest.
			FBC	Mitigated.
Comment: Market soundings over last 6-9 months suggests high level of interest in project, this has been established through meetings with national contractors, visits to other projects and general levels of enquiries.				
TOTAL	**100**	**62**		

Department and Contact: Health Finance		
Comment	**NHS Board Response**	**Scottish Govt. Use**
34) The key financial assumptions, risks and mitigating actions within the plan demonstrate a constructive approach in addressing known issues together with those unknown at this stage over the period of the plan. 9.3.1 Note 1 – can you clarify basis for £23m assumption here (I am assuming that this is a share of additional £90m RTT funding announced from 2008-09)? Can you advise to what extent has other 'recurrent' waiting times funding including uplift been incorporated within the plan? Key Assumptions – pay uplift assumption of 2% seems low given current information. Can you confirm basis for this and how estimated pay drift has been considered?	Yes, your assumption is correct…we have included this on account of its significance to us and because we anticipate a share of this pot coming to NHSGG&C over the 3 years to 2010/11. We have assumed that this will be additional to what we already receive from SGHD in terms of recurring funding for waiting list work. The amount we currently receive, and have assumed we will continue to receive recurrently in 2008/09 and beyond is £13.3m. The basis of our assumption re general pay uplift is explained in section 9.3.1 (i) "Key Assumptions" i.e. pay increase is forecast in line with current UK Government Policy on pay awards. The risk of pay uplift exceeding 2% is considered within section 9.3.1 (iii) (b). This section also explains how the Board anticipates managing this risk during the course of the period to 2017/18. In 2008/09 there is provision for an additional 0.5% re incremental drift associated with Agenda for Change implementation, on account of its significance at this early stage of implementation, also there is provision for 0.23% related to	

	implementation of the unsocial hours agreement related to Agenda for Change. Beyond 2008/09, it is assumed that the potential impact of incremental drift will be contained within base service budgets, as has always been the practice within NHSGG, now NHSGG&C.	
35) In terms of the NHS Scotland can the clarify if there are any service issues perhaps not appropriate for inclusion in the OBC but that should be considered in light of impact on other Boards (e.g. costs / activity with Western Isles, Waiting Times Board).	I can confirm that the forward financial plan makes specific provision for all service issues which are known to the Board, may be material in value and can be quantified at this stage.	
Department and Contact: Property		
Comment	**NHS Board Response**	**Scottish Govt. Use**
36) The Cost of the exemplar design has been worked up using Departmental Cost Allowances. As this approach is no longer supported in Scotland, what measures have been taken to confirm (at a high strategic level) that the costs determined by using these Cost Allowances in line with market costs?	Davis Langdon has carried out internal comparisons of construction costs against other hospital projects and are of the opinion that the current day construction cost at 4Q 2007 (MIPS 508) of £2,668/m^2 GFA is within the range that could be anticipated for the project. Departmental Costs allowances account for approximately 55% of the construction costs, with 45% of the construction costs being On-Costs, which are based on current market rates, either as individual measured rates or costs per m^2 GFA for those elements within the exemplar design.	

	In addition a cost check of the M & E services element included within the departmental costs has been carried out to reflect current market rates. It should also be noted that the rate per m^2 excludes any allowance for Optimism Bias currently included in the estimate at 22.6% and site preparation and clearance works costs, which form part of a separate client budget, are outwith the scope of works covered under the construction costs. The Board has carried out some analysis of project costs in order to provide some assurance that our cost base is both prudent and accurate. This work includes: <u>PUK Workshop</u> As part of the workshop we requested a comment from PUK on our project cost estimate. PUK advised that comparisons across schemes can be notoriously difficult but nonetheless, didn't see costs exceed £3,000/m^2 until Barts and the London scheme and, even here, there were some very peculiar reasons for this (the "London" price effect, very uncertain ground conditions, close proximity of London Underground tunnels, requirements re English Heritage, condensed site, highly urbanised area, site clearance requirements, phased build etc) many of which do not feature on the Southern General site. Therefore the assumption being our project cost estimate was at the higher end of the scale. <u>Benchmarking</u> We carried out some benchmarking analysis to provide the Board with some assurance regarding project costs by carrying out a high level comparison of other similar project costs throughout the UK. Again, our project is at the higher end of the scale. <u>Cost Assessment</u> The Board have also carried out some informal capex reviews with two West of	

	Scotland companies specialising in the healthcare market. This exercise was undertaken on the basis that our benchmarking suggested that our capex was at the upper end of the range expected for a large acute healthcare facility. Both companies took the schedules of accommodation included in the OBC and worked up cost using BCIS methodology. In both instances the costs came within a 5% envelope below the Board's cost plan. On-costs were kept to levels similar to those used by Davis Langdon as the reviews were high level and the companies were not familiar with the detail of the on-cost build up by Davis Langdon.	
37) An appropriate date for indexation of construction costs has been adopted and these costs indexed using the BCIS TPI index. It has been observed recently that the BCIS data underscores construction cost inflation in the Greater Glasgow area; what sensitivity analysis has been undertaken to test the BCIS data against current and projected construction cost inflation in Glasgow?	The costs have been indexed using the "Median of Public Sector Public Tender Prices (MIPS)" and the "APSAB Building Cost Index" as published by the Department of Health. The indexation period included from the baseline estimated costs for the project is 8 years. Forecasts change dramatically within such a period and it is expected that the average of all of the different indexes that can be used to adjust costs, will be equalised over the length of the project. As detailed, in the response to the above question, 45% of the estimated construction costs (the on-costs) are based on current market rates. There is also, the equivalent of £95,561,737, contained within the Optimism Bias, which is applicable to construction only costs and equates to an estimated outturn construction cost of £3,548/m^2 GFA. This is at a level that could be reasonably anticipated at this time.	
38) The actions taken to future-proof the building are welcome. However, evidence emerging around climate	The design currently includes provision for mechanically ventilating all of the patient areas. The capacity of these systems have been calculated using the current weather data published by the C.I.B.S.E. Should external temperatures continue to	

change suggests there is a strong likelihood of an increased occurrence of a number of weather patterns especially increased heat waves, increased frequency of storms including high wind speeds. What actions have been taken to ensure that the building is future-proofed against these predicted climatic occurrences?	increase, then these systems can be easily adapted, if identified in advance, as technology improves with minimal impact. High winds and frequency of storms should not affect the internal operation of the building.	
39) *Section 1.11 & 3.9* Are there any implications in delivering the core project from the timing/nature of the university to proceed with their development? Is the University contract to be let by the Board as part of the main contract? Have the services issues relating to the university facility been considered and have any	The proposed site for the University development means that it will be a separate construction site with independent access from the main build site. This will allow the construction of the University development to take place in parallel to the main hospitals/lab development as they are not part of the same project structure. The current programme is for the University development to be complete at the same time as the Children's Hospital and New Labs build which is 1st Quarter 2013. No, it will not be part of the main contract, it will be a separate contract developed and let by the University but fully controlled by the Board on a site management basis. A full risk management plan will be developed in parallel to contract development. The services issues relating to the University development have been considered and it is expected that the University will fully pay for the building, all main service connections and related services e.g. FM.	

contributions due from the university to support common costs?		
40) *Section 8.1 (last sentence)* Suggest that this is altered to state that risk allocation adequately considered in arriving at selected procurement strategy. 41) It would be helpful (in common with procurement workshop discussion on 19th February) to state what the Board's key priorities/objectives are in arriving at the procurement route.	Noted, will amend. The Board's critical success factors considered in arriving at the procurement route are given below. These have been agreed by the Board's senior officers and will be formally agreed by the Project Executive Group on Wednesday 9th April 2008. The critical success factors are as follows:	

	<table><tr><td>**Cost**</td><td>Early cost certainty</td></tr><tr><td></td><td>Risk transfer on cost over-run</td></tr><tr><td></td><td>Demonstrate value for money</td></tr><tr><td></td><td>Working within budget</td></tr><tr><td>**Programme**</td><td>Early programme certainty</td></tr><tr><td></td><td>Early transfer of programme risk</td></tr><tr><td></td><td>Meets start on site target date</td></tr><tr><td></td><td>Meet cashflow restrictions (i.e. matching cashflow with spend on the Project)</td></tr><tr><td>**Quality**</td><td>Early contractor involvement</td></tr><tr><td></td><td>Whole life cost and sustainability issues</td></tr><tr><td></td><td>Client input to design</td></tr><tr><td></td><td>Client input to sustainability issues</td></tr><tr><td></td><td>Integrated design and construction solution</td></tr><tr><td></td><td>Ability to deliver against Board's quality benchmarks</td></tr><tr><td>**Risk**</td><td>Early transfer of design and construction risk</td></tr><tr><td></td><td>Flexibility for changes post-contract</td></tr><tr><td></td><td>Collaborative approach to cost risk, continuous review and mitigation</td></tr><tr><td></td><td>Attractiveness to market</td></tr><tr><td></td><td>Impact on Board resource (availability of staff)</td></tr></table>	
42) *Section 9.1.4(v)* Can detail be provided on the tax adjustment calculation of 6%?	**Taxation adjustment** The revised Green Book requires, for PPP projects only, a tax adjustment reflecting the differential tax implications of a PPP project compared to traditional	

<table>
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<td>procurement. The tax adjustment factor has been estimated by reference to the relevant tax flowchart. In applying this guidance a number of assumptions had to be made which are detailed below.
<table>
<tr><th>Narrative</th><th>Factor to be applied %</th><th>Notes</th></tr>
<tr><td>Step One</td><td>2</td><td>Standard uplift applies to all projects</td></tr>
<tr><td>Step Two</td><td>3</td><td>Nominal cost for facility management is likely to be less than the capital value</td></tr>
<tr><td>Step Three</td><td>1</td><td>The project is likely to be on revenue account for tax purposes</td></tr>
<tr><td>Step Four</td><td>0</td><td>Project sector is not risky</td></tr>
<tr><td>Total uplift factor to be applied to the CPAM</td><td>6</td><td>The CPAM cost prior to risk adjustment is uplifted by this factor</td></tr>
</table>
The factor relates only to corporation tax, and consequently does not include other taxes such as VAT, PAYE or NIC.</td>
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<tr>
<td>43)
Grateful for an update on procurement decision making process and timetable following 19th February workshop in order to inform submission to Senior Officers Ministers.</td>
<td>Procurement Update - Summary Report
To fully explore the range of public funded options for the project, the Board organised a workshop, which was held on 19th February 2008, to consider the key procurement routes available and make a selection of the most appropriate format to suit the scope and demands of the new South Glasgow Hospitals Project.

Process
The format for the workshop involved the review of various procurement routes as listed below, and through consideration of these against the Board's key drivers or critical success factors, select a short list for further consideration. The long list of</td>
<td></td>
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	options were; • Traditional • Management Contracting • Construction Management • Design & Build - Single stage • Design & Build – Two stage • Design Build Manage & Operate • Alliancing • Prime The workshop was attended by Board Senior Officers, Scottish Government Private Finance and Capital Unit, Financial Advisers, Legal Advisers and Technical Advisers. Previously the Board had agreed the critical success factors (CSF's) to be considered (slightly adjusted at the workshop through discussion) against each of the procurement models. The Board's critical success factors to assist with the selection of a procurement route are confirmed as follows;	

Cost	Early cost certainty – required to give early reassurance that ASR will be realised
	Risk transfer on cost over-run
	Demonstrate value for money
	Working within budget
Programme	Early programme certainty
	Early transfer of programme risk
	Meets start on site target date
	Meet cashflow restrictions (i.e. matching cashflow with spend on the Project)
Quality	Early contractor involvement (early design certainty – more time to design hospitals)
	Whole life cost and sustainability issues
	Client control over design to ensure clinical certainty)
	Integrated design and construction solution
	Ability to deliver against Board's quality benchmarks
Risk	Early transfer of design and construction risk
	Flexibility for changes post-contract
	Collaborative approach to cost risk, continuous review and mitigation
	Attractiveness to market
	Impact on Board resource (availability of staff)

The workshop was facilitated by the Board's legal advisers, Shepherd and Wedderburn. The Board also invited 4 teams of consultants (Currie & Brown, Davis Langdon, Keppie Design and Mott Macdonald) to present their views on the most appropriate route based on the list of CSF's.

The output from the workshop identified that there were probably two preferred options which could deliver the Board's objectives / critical success factors, and

	these were; • Two Stage Design & Build • Partnering / Prime Contracting. Following on from the Procurement Workshop, Board Officers met on 5th March 2008 to assess the two preferred options against; • The critical success factors • Pros & cons of each option • Risk and constraints of each option The outcome of this assessment determined that a Two Stage Design and Build format (options of 3-2-1 or 3-1) may provide the best solution in terms of cost certainty with a good level of competition and also remain attractive to the market by reducing the commitment of full bids by 3 teams. In addition to the above it was agreed that to conclude a final/formal appraisal process the Board needed input from the market place with regard to the attractiveness to the market of delivering the project through a 2-stage Design and Build. It was agreed to carry out a market sounding exercise with potential developers / construction companies to obtain their views and feed this into the final appraisal. It is anticipated that the market sounding exercise would be completed by early April 2008 and subsequently the formal appraisal to follow immediately thereafter to determine the preferred procurement method. The Board will conclude the exercise by preparing a summary report and recommendation of a preferred procurement route.	

44) *Page 88 (first para)* Suggest insertion of "an additional" before £24m per annum.	Noted, will amend.	
45) *Page 91 (last para)* Suggest references to "pot" be changed to "reserve".	Noted, will amend.	
46) *Section 10* Start of second para – suggest that this has to have reference to a comparable VFM position, therefore the impact of affordability on the deliverability of each procurement option is considered.	Noted, will amend to:- There was little to differentiate the alternative procurement routes in terms of their capacity to deliver Value For Money, however a publicly funded capital route offers the potential to deliver an affordable solution. The preferred procurement route is therefore through public finance.	
47) *Section 10.2* Top page 100 – refers to a D&B contract – does that pre judge the outcome of the procurement decision? Page 100 (3rd para) remove reference to "Treasury" and replace with Public	No, not meant to pre judge - will amend to avoid any misunderstanding. Amended	

Capital.		
48) *Section 15* Noted that the inclusion of an independent member of the Procurement and Finance Group is in accordance with the recommendation of Gateway Review. It has previously been advocated by both SGHD and PUK that there is independent representation at Project Board level. How is the Board to take this issue forward?	There will be external representation (commercial advisor) on both the New South Glasgow Hospitals' Executive Board (which oversees the Project Groups, and has delegated executive authority), and also the Procurement and Finance Group (which is accountable for the planning and delivery of all procurement measures).	
49) *Optimism Bias* Request for : 1) Optimism Bias details for (a) Greenfield Option, (b) Option 1. 2) Details of Mitigation Factors for New Laboratory build.	Please find Optimism Bias details for Greenfield Option and Option 1 attached. Please note that the Optimism Bias for Options 1 and 1a are the same, (as the adult and children's hospitals are the same in both options). Please also find details re the Mitigation Factors for the New Laboratory build.	

Optimism Bias Details

Greenfield Option

NHS Greater Glasgow - Southern General Hospital
New South Glasgow Acute Hospital
Greenfield Option

Review 28th December 2007

Optimism Bias - Upper Bound Calculation for Build

Lowest % Upper Bound	13%
Mid %	40%
Upper %	80%
Actual % Upper Bound for this project	58%

Build complexity

Choose 1 category		X		
Length of Build	< 2 years		0.50%	0
	2 to 4 years		2.00%	0
	Over 4 years	X	5.00%	5.00%

Choose 1 category				
Number of phases	1 or 2 Phases		0.50%	0
	3 or 4 Phases		2.00%	0
	More than 4 Phases	X	5.00%	5.00%

Choose 1 Category				
Number of sites involved (i.e. before and after change)	Single site*		2.00%	0
	2 Site		2.00%	0
	More than 2 site	X	5.00%	5.00%

* Single site means new build is on same site as existing facilities

Location

Choose 1 Category				
New site - Green field	New build		3%	0
New site - Brown Field	New Build	X	8%	8.00%
Existing site	New Build		5%	0
	or			
Existing site	Less than 15% refurb		6%	0
Existing site	15% - 50% refurb		10%	0
Existing site	Over 50% refurb		16%	0

23.00%

Optimism Bias - Actual Calculation for Build

Actual % Upper Bound for this project	58%
Risk factor after Mitigation for this project %	82%
Actual % for this project	47.6%

Scope of scheme

Choose 1 category		X		
Facilities Management	Hard FM only or no FM	X	0.00%	0.00%
	Hard and soft FM		2.00%	
				0

Choose 1 category				
Equipment	Group 1 & 2 only	X	0.50%	0.50%
	major Medical equipment		1.50%	0
	All equipment included		5.00%	0

Choose 1 category				
IT	No IT implications		0.00%	0
	Infrastructure	X	1.50%	1.50%
	Infrastructure & systems		5.00%	0

Choose more than 1 category if applicable				
External Stakeholders	1 or 2 local NHS organisations		1.00%	0
	3 or more NHS organisations		4.00%	0
	Universities/Private/Voluntary sector/Local government	X	8.00%	8.00%

Service changes - relates to service delivery e.g NSF's

Choose 1 category				
Stable environment, i.e. no change to service			5%	0
Identified changes not quantified			10%	0
Longer time frame service changes		X	20%	20.00%

Gateway

Choose 1 category				
RPA Score	Low		0%	0
	Medium		2%	0
	High	X	5%	5.00%

35.00%

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NHS GREATER GLASGOW AND CLYDE
NEW SOUTH GLASGOW HOSPITALS PROJECT
Greenfield Site Option

REVIEW OF MITIGATION FACTORS FOR OPTIMISM BIAS CALCULATION - COMMENT IN BLUE

Mitigation Factor Calculation

Contributory Factor to Upper Bound	% Factor Contributes	% Factor Contributes after mitigation	Stage	Mitigation Factor
Progress with Planning Approval	4	4	SOC	No discussion
			OBC	
			FBC	
Other Regulatory	4	4	SOC	
			OBC	No work undertaken
			FBC	
Depth of surveying of site/ground information	3	3	SOC	
			OBC	No work undertaken
			FBC	
Detail of design	4	3	SOC	Concept only identified
			OBC	
			FBC	
Innovative project/design (i.e. has this type of project/design been undertaken before)	3	2	SOC	
			OBC	Standard hospital build
			FBC	
Design complexity	4	3	SOC	
			OBC	No design work undertaken, although solution not expected to be any more complex than current modern hospital build
			FBC	
Likely variations from Standard Contract	2	1	SOC	No contract chosen, however no variations to the standard contract anticipated..
			OBC	
			FBC	
Design Team capabilities	3	2	SOC	
			OBC	Previous relevant experience of individuals involved? Capacity? Design team will be selected for demonstrable experience on large, high value and complex healthcare projects.
			FBC	
Contractors' capabilities (excluding design team covered above)	2	1	SOC	
			OBC	Previous relevant experience of individuals involved? Capacity? Part of the evaluation process will require consortia to have demonstrable experience on on large, high value, complex healthcare projects.
			FBC	
Contractor Involvement	2	2	SOC	
			OBC	Buildability and opportunity to influence design would be a requirement.
			FBC	
Client capability and capacity (NB do not double count with design team capabilities)	6	5	SOC	Degree of team in place with relevant experience
			OBC	Full team being put in place for procurement
			FBC	
Robustness of Output Specification	25	20	SOC	
			OBC	Some of the work for Option 1a will be utilised.
			FBC	
Involvement of Stakeholders, including Public and Patient Involvement	5	5	SOC	
			OBC	No work on this
			FBC	
Agreement to output specification by stakeholders	5	5	SOC	
			OBC	No agreement
			FBC	
New service or traditional	3	2	SOC	
			OBC	Assessment of how innovative/new service model is at national/regional/local level, has this ever been tried before? Traditional DGH Service Model. While service delivery will remain similar only in different location, re-design and and overview of whole hospital strategy requires further work.
			FBC	
Local community consent	3	3	SOC	
			OBC	No work here
			FBC	
Stable policy environment	20	15	SOC	
			OBC	Same as Option 1a
			FBC	
Likely competition in the market for the project	2	2	SOC	
			OBC	Not tested
			FBC	
TOTAL	**100**	**82**		

Optimism Bias Details

Option 1

NHS Greater Glasgow - Southern General Hospital
Option 1 - New South Hospitals

Optimism Bias - Upper Bound Calculation for Build

Lowest % Upper Bound	**13%**
Mid %	**40%**
Upper %	**80%**
Actual % Upper Bound for this project	**37%**

Build complexity

Choose 1 category		X			
Length of Build	< 2 years		0.50%	0	
	2 to 4 years	X	2.00%		2.00%
	Over 4 years		5.00%	0	
Choose 1 category					
Number of phases	1 or 2 Phases	X	0.50%		0.50%
	3 or 4 Phases		2.00%	0	
	More than 4 Phases		5.00%	0	
Choose 1 Category					
Number of sites involved (i.e. before and after change)	Single site*	X	2.00%		2.00%
	2 Site		2.00%	0	
	More than 2 site		5.00%	0	

* Single site means new build is on same site as existing facilities

Location

Choose 1 Category					
New site - Green field	New build		3%	0	
New site - Brown Field	New Build		8%	0	
Existing site	New Build	X	5%		5.00%
	or				
Existing site	Less than 15% refurb		6%	0	
Existing site	15% - 50% refurb		10%	0	
Existing site	Over 50% refurb		16%	0	

9.50%

Optimism Bias - Actual Calculation for Build

Actual % Upper Bound for this project	**37%**
Mitigation for this project %	**62%**
Actual % for this project	**22.6%**

Scope of scheme

Choose 1 category		X			
Facilities Management	Hard FM only or no FM		0.00%	0	
	Hard and soft FM	X	2.00%		2.00%
Choose 1 category					
Equipment	Group 1 & 2 only	X	0.50%		0.50%
	major Medical equipment		1.50%	0	
	All equipment included		5.00%	0	
Choose 1 category					
IT	No IT implications		0.00%	0	
	Infrastructure	X	1.50%		1.50%
	Infrastructure & systems		5.00%	0	
Choose more than 1 category if applicable					
External Stakeholders	1 or 2 local NHS organisations	X	1.00%		1.00%
	3 or more NHS organisations		4.00%	0	
	Universities/Private/Voluntary sector/Local government		8.00%	0	

Service changes - relates to service delivery e.g NSF's

Choose 1 category				
Stable environment, i.e. no change to service		5%	0	
Identified changes not quantified		10%	0	
Longer time frame service changes	X	20%		20.00%

Gateway

Choose 1 category					
RPA Score	Low		0%	0	
	Medium	X	2%		2.00%
	High		5%	0	

27.00%

A53494945

NHS GREATER GLASGOW AND CLYDE
NEW SOUTH GLASGOW HOSPITALS PROJECT
OPTION 1

4 March 08 Rev 2.0

REVIEW OF MITIGATION FACTORS FOR OPTIMISM BIAS CALCULATION - COMMENT IN BLUE

Mitigation Factor Calculation

Contributory Factor to Upper Bound	% Factor Contributes	% Factor Contributes after mitigation	Stage	Mitigation Factor
Progress with Planning Approval	4	2	SOC	Opened discussion with planning authority, some engagement
			OBC	Outline consent in place, with any Planning Conditions and requirements for Section 106 or similar agreements established, including any specific requirements of e.g. Environmental
			FBC	Full Consent in place. Judicial Review period passed.
Comment: Outline planning application to be considered by GCC DRS Committee on 15th January 08, conditional approval with Sect. 75 agreement expected.				
Other Regulatory	4	4	SOC	Degree of sign off from Fire Authority, HSE, transport authorities, local government etc.
			OBC	
			FBC	
Comment: Discussions in progress with Scottish Water, Core Utilities and Transport Scotland no show stoppers. Conditional approval from SNH, SEPA, SPT, A+DS, SEDD, Airport Safeguarding. Fire and others outstanding so no mitigation.				
Depth of surveying of site/ground information	3	2	SOC	Desktop study undertaken of own site.
			OBC	Investigations undertaken, historical records examined.
			FBC	Full survey of conditions, site services and topographics.
Comment: Desktop study on ground conditions complete, including review of site investigations undertaken around the campus over the last 30 years. Mining report has established no known workings in area. Ground conditions and water table known problem, pile solution and de-watering of basement and foundations part of design from SKM. Enabling works package includes for site survey and clearance works to remove stockpiled rubble and undertake full SI.				
Detail of design	4	2	SOC	Concept/masterplan/DCP
			OBC	1:500s agreed and selected 1:200s.
			FBC	All 1:200s in place, key 1:50s (depends on procurement route.
Comment: Design developed in line with NHS Estates Design Development Protocol for PPP schemes and includes 1:500 departmental relationship drawings for both hospitals at all levels and 1:200 layouts for 5 key departments within each hospital, developed in discussion with user groups. Detailed schedules of accommodation developed by healthcare planners along with draft clinical output spec's for some departments. Site wide development plan and campus development plan also complete. Level of design has enabled the QS to measure plant, lift and circulation space to assist with the provision of more robust on cost %.				
Innovative project/design (i.e. has this type of project/design been undertaken before)	3	2	SOC	
			OBC	
			FBC	
Comment: Design solution not considered innovative, podium and stack solution has been used before on many hospital projects throughout the UK and worldwide.				
Design complexity	4	2	SOC	This might include complex M&E solutions (requires further development)
			OBC	
			FBC	
Comment: Solution not expected to be any more complex than a modern hospital build today, height may add to the construction complexity.				
Likely variations from Standard Contract	2	1	SOC	No contract chosen.
			OBC	Yes/no with measurement of scale of variations
			FBC	
Comment: no variations to standard contract form anticipated..... to be avoided.				
Design Team capabilities	3	1	SOC	Previous relevant experience of individuals involved. Capacity
			OBC	
			FBC	
Comment: Design Team will be selected for demonstrable experience on large, high value and complex (phased) healthcare projects. Existing team have large project experience, maybe re-selectec				
Contractors' capabilities (excluding design team covered above)	2	1	SOC	Previous relevant experience of individuals involved. Capacity. Track record of delivery.
			OBC	
			FBC	
Comment: Part of evaluation process will require consortia to have demonstrable experience on large, high value and complex (phased) healthcare projects				
Contractor Involvement	2	2	SOC	Buildability. Opportunity to influence design.
			OBC	
			FBC	
Comment: Minimal involvement to date on buildability etc., bar networking on programme and cost/sq.m issues, therefore no mitigation.				
Client capability and capacity (NB do not double count with design team capabilities)	6	3	SOC	Degree of team in place with relevant experience.
			OBC	Full team in place for procurement.
			FBC	Robust implementation plan in place.
Comment: Project Team in place to prepare PSC and OBC, further resource required once into Stage II post OBC approval, resource plan being prepared by Project Team. Gateway 1 review outcome - no red, 5 amber, 1 green.				
Robustness of Output Specification	25	15	SOC	Definition of scope and extent of services. Degree of outstanding decisions.
			OBC	
			FBC	
Comment: PSC design, M&E prelim design, drawings and draft clinical specs started, plan to use BCR's and other related material / documentation developed for ACAD's as basis for NSGH project.				
Involvement of Stakeholders, including Public and Patient Involvement	5	3	SOC	Scope of stakeholders to be involved. Plan in place to engage.
			OBC	Implementation of Plan
			FBC	Involvement demonstrated.
Comment: User Groups involved with design and preparation of prelim output specs. Staff side sit on Project Board. Community Engagement have held patient and visitor events to feed into design requirements				
Agreement to output specification by stakeholders	5	3	SOC	Letters of support from clinicians, Trade Unions, staff groups, patient representatives/groups.
			OBC	
			FBC	
Comment: design and output specs at early stage, however clinical groups supportive of project and involved in design events to review PSC design and departmental relationships.				
New service or traditional	3	2	SOC	Assessment of how innovative/new service model is at national/regional/local level. Has this ever been tried before?
			OBC	
			FBC	
Comment: while service delivery will remain similar only in diferent location, re-design and overview of whole hospital strategy requires further work.				
Local community consent	3	1	SOC	Consideration of traffic noise/existence of protestors or pressure groups
			OBC	
			FBC	
Comment: Local community supportive of proposals for new hospitals, minimal feedback during consultation process for outline planning application. Gateway 1 report acknowleged high level input on community engagement.				
Stable policy environment	20	15	SOC	Degree to which new policy/standards are applicable depending upon which stage is reached.
			OBC	
			FBC	
Comment: PSC design cost plan accounts for 100% single beds, sprinklers and full mech ventilation. Not aware of other major issues in pipeline				
Likely competition in the market for the project	2	1	SOC	Degree project has been marketed.
			OBC	Evidence of market interest.
			FBC	Mitigated.
Comment: Market soundings over last 6-9 months suggests high level of interest in project, this has been established through meetings with national contractors, visits to other projects and general levels of enquiries.				
TOTAL	**100**	**62**		

Optimism Bias Details

New Laboratory Build

LABORATORY SERVICE REVIEW

Optimism Bias - Upper Bound Calculation for Build

Lowest % Upper Bound	13%
Mid %	40%
Upper %	80%
Actual % Upper Bound for this project	31%

Optimism Bias – Actual Calculation for Build

Actual % Upper Bound for this project	31%
Mitigation for this project %	64%
Actual % for this project	20%

Build complexity

Choose 1 category		X		
Length of Build	< 2 years	x	0.50%	0.50%
	2 to 4 years		2.00%	0
	Over 4 years		5.00%	0

Choose 1 category				
Number of phases	1 or 2 Phases	x	0.50%	0.50%
	3 or 4 Phases		2.00%	0
	More than 4 Phases		5.00%	0

Choose 1 Category				
Number of sites involved (i.e. before and after change)	Single site*	x	2.00%	2.00%
	2 Site		2.00%	0
	More than 2 site		5.00%	0

* Single site means new build is on same site as existing facilities

Location

Choose 1 Category				
New site - Green field	New build		3%	0
New site - Brown Field	New Build		8%	0
Existing site	New Build		5%	0
	or			
Existing site	Less than 15% refurb	x	6%	6.00%
Existing site	15% - 50% refurb		10%	0
Existing site	Over 50% refurb		16%	0

9.00%

Scope of scheme

Choose 1 category		X		
Facilities Management	Hard FM only or no FM	x	0.00%	0.00%
	Hard and soft FM		2.00%	
				0

Choose 1 category				
Equipment	Group 1 & 2 only	x	0.50%	0.50%
	major Medical equipment		1.50%	0
	All equipment included		5.00%	0

Choose 1 category				
IT	No IT implications		0.00%	0
	Infrastructure	x	1.50%	1.50%
	Infrastructure & systems		5.00%	0

Choose more than 1 category if applicable				
External Stakeholders	1 or 2 local NHS organisations		1.00%	0
	3 or more NHS organisations		4.00%	0
	Universities/Private/Voluntary sector/Local government	x	8.00%	8.00%

Service changes - relates to service delivery e.g NSF's

Choose 1 category				
Stable environment, i.e. no change to service			5%	0
Identified changes not quantified		x	10%	10.00%
Longer time frame service changes			20%	0

Gateway

Choose 1 category				
RPA Score	Low		0%	0
	Medium	x	2%	2.00%
	High		5%	0

22.00%

LABORATORY SERVICE REVIEW

Contributory Factor to Upper Bound	% Factor Contributes	% Factor Contributes after mitigation	Explanation for rate of mitigation
Progress with Planning Approval	4	3	Outline Planning application was considered by GGC DRS committee in January. Conditional Approval with Section 75 Agreement given.
Other Regulatory	4	3	Discussions in progress with Scottish Water, Core Utilities etc as component part of main campus development
Depth of surveying of site/ground information	3	2	Desktop study on ground conditions complete, including review of site investigations undertaken on campus over last 30years. Mining report has established no known workings in area. Ground conditions and water table a known problem. Enabling works package includes for site clearance to remove stockpiled rubble and undertake full site investigation.
Detail of design	4	4	Design is in early stages however, departmental relationships have been established and key 1:200 agreed
Innovative project/design (i.e. has this type of project/design been undertaken before)	3	2	Design solution not considered innovative and has been employed successfully on other laboratory developments
Design complexity	4	2	Solution not expected to be more complex than standard laboratory developments
Likely variations from Standard Contract	2	0	No variations to standard contracts anticipated
Design Team capabilities	3	2	Design Team will be selected on basis of demonstrable experience on the successful delivery of similar projects
Contractors' capabilities (excluding design team covered above)	2	1	part of the evaluation process will require propspective contractors to have demonstrable experience on similar projects.
Contractor Involvement	2	2	Minimal Involvement to date. Project viewed as standard laboratory development to current standards
Client capability and capacity (NB do not double count with design team capabilities)	6	3	Project team in place for completion of OBC, team will be strengthed following approval to proceed given.
Robustness of Output Specification	25	20	Draft models of service delivery, departental specs and adjacencies prepared.
Involvement of Stakeholders, including Public and Patient Involvement	5	3	User groups involved with design and preparation preliminary output specs.
Agreement to output specification by stakeholders	5	3	Design and Output specs at an early stage however, clinical groups are fully involved in all aspects of design
New service or traditional	3	2	Service delivery will remain similar to current only in different location
Local community consent	3	1	Laboratory project is a component part of main campus development. Local community supportive of proposals for new hospital
Stable policy environment	20	10	Laboratory design whilst still at an early stage will be developed in line with latest laboratory standards
Likely competition in the market for the project	2	1	Through meetings with national contractors and general levels of enquiries interest in project is expected.
TOTAL	**100**	**64**	

Note: Across all contributory factors, mitigation would be expected to be greater the greater the extent of risk quantification and risk management.

THE SCOTTISH HOSPITALS INQUIRY

CURRIE & BROWN UK LIMITED

RESPONSE TO PPP15 – PROJECT GOVERNANCE STRUCTURE

INTRODUCTION

1. This response to the Inquiry's Provisional Position Paper 15 on '*Governance Structure within the project to construct the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow*' ("**PPP15**") is served on behalf of Currie & Brown UK Limited ("**Currie & Brown**").

2. The definitions and abbreviations used in PPP15 are adopted herein for ease of reference, save where otherwise stated, and save that (for consistency with previous responses and submissions), the building contractor now known as Multiplex Construction Europe Ltd is referred to throughout as "**Multiplex**" and not by its earlier names.[1]

3. This response follows the same structure and adopts the same headings as PPP15. References herein to paragraph numbers are to the numbered paragraphs of PPP15 unless otherwise stated. References to documents in the numbered bundles of evidence before the Inquiry are in the form [**Bundle No._Volume No. / Page no**.].

4. Currie & Brown has previously explained its role on the project for the procurement, design, and construction of the Queen Elizabeth University Hospital and the Royal Hospital for Children in Glasgow ("**the Project**") in detail in its response to the Inquiry's PPP 13 dated 29 November 2024 [**22_3/7**], which is not repeated here

SCOTTISH GOVERNMENT INVOLVEMENT IN PROCUREMENT

5. Paragraph 60 quotes from the 2005 edition of '*SHFN 30 – Infection Control in the Built Environment: Design and Planning (Version 2)*'. This states at paragraph 3.3, in relation to the function of "*Project Manager*", that "*NHS Boards* ***rarely have capacity in-house*** *to develop and manage all aspects of the project, therefore it is usually necessary to appoint external Advisors*

[1] Brookfield Construction (UK) Ltd until 21 February 2011, then Brookfield Multiplex Construction Europe Limited until 31 August 2016.

and Consultants". As paragraph 61 observes, SHFN 30 therefore contemplates the use of an external project manager by contrast with the approach taken on the present Project, where GGC took on the formal role of NEC Project Manager. In that regard, it is relevant to note that Mr. Peter Moir, who was GGC's Project Manager for the Project, was a qualified Architect with considerable prior experience of delivering major healthcare projects.[2] Further, Mr. Alan Seabourne, who was GGC's Project Director, was a qualified mechanical & electrical engineer.[3] Both Mr. Moir and Mr. Seabourne worked full-time on the Project. Therefore, GGC had relevant and full-time in-house expertise on the present Project.

GOVERNANCE AND KEY EVENTS PRIOR TO 2008

6. Paragraph 92 states that "*[i]n 2005 the Performance Review Group, approved £1.932m for* ***Technical Advisers*** *to assist in the development of a new South Glasgow Hospital project*". Paragraph 96 records that "*[i]n February 2007, the Design Brief was being developed by GGC's Project Team and its* ***technical advisors***". For the avoidance of doubt, the technical advisers who worked on the Design Brief in February 2007, following the approval of funds in 2005, were Davis Langdon LLP.[4] Currie & Brown had no involvement in the development of the Design Brief and was not engaged on the Project until 2 September 2008, following a tender process that began in June 2008,[5] and after approval of the Outline Business Case.

7. Paragraph 97 refers to health planner Iain Buchan being involved in an early User Group process to develop the Clinical Output Specifications ("**COS**") sometime in 2007. Mr. Buchan was a director of Buchan Associates, whom Currie & Brown later engaged as part of its Technical Team following its appointment by GGC on 2 September 2008. Accordingly, any involvement by Mr. Buchan in the development of the COS for the Outline Business Case in 2007 whilst Davis Langdon LLP was the technical adviser is outside Currie & Brown's knowledge, but certainly any involvement that Mr. Buchan may have had in that process was not under appointment by Currie & Brown. Buchan Associates was not appointed by Currie & Brown until on or around 8 October 2008.

8. Paragraph 99 says that "*[i]n September 2008, the User Groups began to focus their attention on the ERs with support from the NHS GGC Project Team and technical advisors. It was expected*

[2] See paragraph 124 of Douglas Ross's witness statement for the Glasgow 4, Part 1 hearing.
[3] See paragraph 1A of Alan Seabourne's witness statement for the Glasgow 4, Part 1 hearing.
[4] See paragraph 36 of Alan Seabourne's witness statement for the Glasgow 4, Part 1 hearing which explains that Davis Langdon LLP was GGC's "*first set*" of technical advisers, prior to Currie & Brown's involvement. Paragraph 3.4 of PPP 13 stated that GGC appointed Davis Langdon LLP as "*the project Technical Advisor*" in 2005 "*in contemplation of adopting a public-private partnership procurement structure for delivery of the QEUH/RHC*".
[5] See paragraph 8 of Currie & Brown's response to PPP13; GGC's Invitation to Tender for the role of Lead Consultant and Technical Team dated 26 June 2008 [**17/1814**]; Currie & Brown's tender submission dated 6 August 2008 [**17/1901**]; and the letter from GGC dated 2 September 2008 [**17/1902**].

that the COSs would be finalised by the NHS GGC Project Team at the end of October 2008". GGC's "*technical advisers*" at this stage of the process, in September 2008, was Currie & Brown (together with its Technical Team of sub-consultants, including Buchan Associates) following its appointment on 2 September 2008. Buchan Associates were indeed involved in the finalising of the COS, under appointment by Currie & Brown, in September to October 2008.

GOVERNANCE AND KEY EVENTS PRIOR TO 2008

9. Paragraph 114 refers to a workshop on 19 February 2008. As noted at paragraph 114 and reflected in the Agenda for the workshop, headed "*Procurement Workshop*", [**17/1810**] Currie & Brown attended this workshop. However:

   9.1 It should be noted that this workshop preceded the appointment of Currie & Brown as Lead Consultant and Technical Advisers for the initial pre-design stage of the Project by over six months. The tender process for the appointment of that role did not commence until June 2008, over four months later. Davis Langdon LLP was still the technical adviser to GGC on the Project at the time of this workshop.

   9.2 Paragraph 114 describes Currie & Brown as "*the technical team behind the Exemplar Design*". The Exemplar Design that Currie & Brown was involved in developing, through its Technical Team, was developed during the initial pre-design stage from September 2008 to April 2009 for inclusion in the Employer's Requirements.[6] Therefore, any implication in paragraph 114 that, by the time of the workshop in February 2008, Currie & Brown had been involved in any exemplar design that may have been in development at that time is wrong.

   9.3 This workshop was a market engagement workshop for GGC to explore potential procurement routes for the Project. Item 3 of the Agenda [**17/1810**] says there will be four presentations each lasting 20 minutes from Davis Langdon LLP (GGC's technical adviser on the Project at the time), Currie & Brown, Keppie Design (a healthcare architect), and Mott MacDonald (an engineering, management, and development consultancy). Currie & Brown understands that it was invited to participate in this workshop because it was engaged on a separate project for GGC at the time known as the ACAD project.[7]

10. As noted in paragraph 122, Currie & Brown jointly produced a '*Procurement Paper*' in early December 2008 [**43_2/86**] together with Shepherd & Wedderburn, GGC's solicitors. The

[6] See the table in paragraph 12 of Mark Baird's witness statement for the Glasgow 4, Part 1 hearing.
[7] ACAD stands for Ambulatory Care and Diagnostic Centre. The ACAD project involved the design and construction of the New Victoria Hospital and the New Stobhill Hospital by Balfour Beatty.

'*Procurement Paper*' discussed in detail the advantages and disadvantages of both (a) a procurement model based on a JCT (SBCC) design and build contract compared to (b) an NEC3 model including a competitive dialogue procedure. The '*Procurement Paper*' recommended the latter,[8] but also recommended that "*further market sounding is carried out by the Board in advance of final selection of procurement procedure and form of contract*".[9] Currie & Brown understands that GGC did take market soundings about the form of contract. Therefore, so far as Currie & Brown is aware, GGC had not taken a final decision about the procurement method or form of contract before early December 2008. Indeed, at the time of Currie & Brown's appointment as Lead Consultant and Technical Team on 2 September 2008 it was envisaged that the main contract would be in the SBCC form, not the NEC3 form, as reflected in GGC's Invitation to Tender on 26 June 2008 [**17/1814**][10] and in the draft Memorandum of Understanding[11] provided to Currie & Brown at the same time.

11. Under the heading "*The appointment of Currie & Brown as Technical Advisors*", paragraph 140 says that "*in **May 2007** NHS GGC had sought tenders for project management of the new SGH project, to include technical and design aspects of the project*". This date is wrong: GGC issued an Invitation to Tender for the role of Lead Consultant and Technical Team to Currie & Brown and others on **26 June 2008** [**17/1814**].

GOVERNANCE AND KEY EVENTS IN 2009

12. Paragraph 161 paraphrases the oral evidence that Mr. Seabourne gave at the Glasgow 4, Part 1 hearing[12] as follows:

> "*Mr Seabourne explained that during the period for Competitive Dialogue it was Currie & Brown who were organising meetings.* ***His impression was of a process which was light on design and information, and in which GGC would require that guidance be met but would not take an active role in explaining how that should be done and would leave the question of derogations or 'alternative solutions' up to Currie & Brown***."

13. The oral evidence of Mr. Seabourne which is paraphrased in the second sentence of paragraph 161 (emphasised in bold above) is fundamentally wrong in at least the following respects:

[8] See paragraph 4.1 of the 'Procurement Paper' dated December 2008 [**43_2/103**].
[9] See paragraph 4.3 of the 'Procurement Paper' dated December 2008 [**43_2/103**].
[10] See, e.g., paragraph 1.2 (top of [**17/1817**]); paragraph 1.6 (table, Stage 3 at [**17/1821**]); and paragraph 2.12 [**17/1828**] of the Invitation to Tender.
[11] See, e.g., the reference in Part C of the Appendix to the Memorandum of Understanding to the consultancy services including "*Employer's Agent role (construction stage)/Contract Administration*" [**17/1959**], which are defined roles in the SBCC form of contract but not in the NEC3 form of contract.
[12] The reference to this oral evidence given in footnote 138 at paragraph 161 is: A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne, Columns 29 – 32.

13.1 This procurement process was a Competitive Dialogue in substance as well as in name. Currie & Brown did arrange (and attend) these meetings, as Mr. Seabourne said; but, contrary to his oral evidence, the members of GGC's Project Team, members of GGC's user groups, and GGC subject matter experts who also attended those meetings participated fully and actively in the dialogue and discussions. The discussions centred on the bidders' proposals for meeting the Employer's Requirements – these were GGC's requirements, developed by Currie & Brown's Technical Team, but in close consultation and discussion with GGC's user groups and subject matter experts about their detailed requirements, including in respect of clinical functionality. The Technical Team could not spirit Employer's Requirements out of nothing; they helped translate GGC's detailed substantive requirements into a form that could be presented to and discussed with the bidders.

13.2 Mr. Mark Baird of Currie & Brown explained the collaborative and detailed process by which the Employer's Requirements were developed at paragraphs 28 to 30 of his witness statement for the Glasgow 4, Part 1 hearing as follows:

> "*28. I have been asked to explain why the ERs were a significant component of the ITPCD. It is standard construction practice for the employer to set out their requirements clearly at the outset to ensure that the project meets their needs.* ***The ERs identify (through written narrative and drawings) what the employer (in this case the Board) wishes to buy****. This allows potential bidders to develop their bid and respond to the employer with their bid offer.*
>
> *29.* ***During the compilation of the ERs there was a range of discussions around how to capture and articulate information, as well as gathering of information about the Board's requirements. The Board's requirements included, for example, departmental adjacencies, travel times, lines of sight (bedrooms) and facilities management****.*
>
> *30. I have been asked to explain how the information was captured and articulated.* ***The information was captured by Currie & Brown's Technical Team via consultation with the Board as the client. This was obtained through meetings with clinical user groups, discussions with NHS Estates team members and discussions with the Board's Project Team****. For example, departmental adjacencies were determined with the Board's Project Team and the clinical user groups and informed the layout of the plans of the exemplar design which was included in the ERs, so the individuals who were selected by the Board to form develop such requirements.*"

13.3 Currie & Brown's Technical Team could not guess at GGC's requirements in respect of, e.g., "*departmental adjacencies, travel times, lines of sight (bedrooms) and facilities management*"; these had to be communicated by GGC's user groups and subject matter experts for capture by the Technical Team in the form of the Employer's Requirements. In the same way, Currie & Brown and its Technical Team could not interrogate or evaluate the bidders' proposals for meeting those requirements alone at the Competitive Dialogue

sessions; considerable substantive engagement by GGC's attendees was required (and was provided) at those sessions, which took place over an intensive five month period from April to August 2009.

13.4 Thus the GGC attendees at the Competitive Dialogue sessions provided feedback on the bidders' proposals, raised issues with bidders' proposed solutions for meeting the Employer's Requirements, and restated their compliance requirements. Those who attended on behalf of GGC were actively involved in the detailed questioning of the bidders and the interrogation of the bidders' proposed design solutions.

13.5 Mark Baird described Currie & Brown's role in the Competitive Dialogue process as facilitative, at paragraphs 61 to 62 of his witness statement for the Glasgow 4, Part 1 hearing as follows:

> "*61. Currie & Brown were **responsible for the Project Management** of the Competitive Dialogue. **Currie & Brown's role included management of Competitive Dialogue meetings, co-ordinating responses** to the bidders' clarifications and queries and tender evaluation. It was a complex and significant tender process.*
>
> *62. My role in the Competitive Dialogue stage was to **support the process and facilitate discussions** between the Board and the bidders by issuing the agendas and recording the actions arising.*"

13.6 Similarly, Mr. David Hall of Currie & Brown explained his role in the Competitive Dialogue process at paragraphs 55 to 57 of his witness statement for the Glasgow 4, Part 1 hearing as follows:

> "*55. …Currie & Brown was responsible for the project management of the Competitive Dialogue process. This is a procurement process that allows bidders to submit initial solutions and then undertake **a series of negotiations with the client to discuss and develop the solutions**.*
>
> *56. **Currie & Brown's role involved ensuring that the sessions were administered correctly, and that all discussions were recorded in the action tracker**. In practical terms this **required Currie & Brown to ensure that the discussion sessions were held between the Board, including their end users and stakeholders, and the bidders on an individual basis**. We ensured that each session was administered correctly, that each stayed confidential (e.g. that design features and details from one bid were not discussed in front of another bidder) and that all discussions were recorded in action trackers. I attended all the Competitive Dialogue sessions. **My role was to support the organisation of the sessions and to facilitate break-out sessions focusing on clinical functionality and design**.*
>
> *57. Subsequent sessions involved the bidders presenting their developing designs in order to get **feedback from stakeholders and user groups** to further improve them for their final offer.*"

13.7 Therefore, Mr. Seabourne's suggestion that the Competitive Dialogue sessions were "*light on design and information*" is very far from the truth, and does a great disservice to the members of his team who attended those sessions. Further, whilst the GGC attendees (Project Team members, user groups, stakeholders, subject matter experts, etc.) could not direct the bidders on how to achieve the Employer's Requirements, they could and did interrogate the bidders' proposals and provide detailed feedback on the proposed design solutions.

14. Paragraphs 174 to 178 discuss what the Inquiry terms the "*Removal of the Maximum Temperature Variant*". This in fact refers to an instruction by GGC during the Competitive Dialogue process that, rather than being set at a maximum of 28 degrees C as per its original requirements, room temperatures should not exceed 26 degrees C for more than 50 hours in total.

15. Paragraph 176 paraphrases Mr. Seabourne's oral evidence that "*the change [was] decided at a lower level, by the Director of Facilities in discussion with Currie & Brown*".[13] If Mr. Seabourne is suggesting that Currie & Brown had any involvement in either advising on or making that decision he is, again, mistaken. This was a decision taken by GGC, for patient comfort reasons, on the basis of its experience in other hospital projects and which was instructed by GGC. See paragraphs 40 to 41 of Mr. Hall's witness statement:

> "*40. I have been asked about my involvement and understanding, if any, in the removal of the maximum temperature variant (Bundle 17, Document No.26, Page 1063). My expertise and role was restricted to Project Management activities and I am not a mechanical engineer. Therefore,* ***I had no technical involvement in this and am not qualified to comment on this from a technical perspective****. Room temperature guidance is typically set out at an early stage in ERs and was initially set at 28 degrees for the Project. Through facilitating Project meetings where technical matters were discussed, I was aware that* ***Alex Macintyre, the Board Director of Facilities, had expressed concern about the maximum room temperature which was set at 28 degrees. I became aware from these same meetings that a new maximum room temperature of 26 degrees was then set****, with a possible allowance of exceeding the maximum for up to 50 hours per year.* ***I cannot recall a specific meeting where the decision to adopt this new maximum room temperature was approved, or who made the decision.*** *This is a question that Peter Moir would have been able to answer, although I am aware that sadly Peter is now seriously unwell so I appreciate it may not now be possible for that to be put to him.*
>
> *41.* ***I have been asked why Alex McIntyre was concerned about the maximum room temperature being set at 28 degrees. I recall that this was based on his experience of "lessons learned" in relation to patient comfort from previous projects such as ACADs at Victoria and Stobhill, i.e. that the rooms were found***

[13] The reference to this oral evidence given in footnote 161 at paragraph 176 is: A53053542 - Hearing Commencing 13 May 2025, 29 May 2025 – Transcript – Alan Seabourne – Column 41.

to be too warm and that this was also the rationale for reducing the maximum room temperature to 26 degrees."

16. Paragraph 176 also states, in relation to this instruction by GGC, that "*Mr Seabourne* ***and his technical advisors*** *were involved in the details so the proposed changes* ***would need to have been escalated by <u>them</u>*** *to be considered by the PRG or Executive Board*". If the reference to Mr. Seabourne's "*technical advisors*" is intended to refer to Currie & Brown, it should be noted that Currie & Brown was under no obligation, and (importantly) had no authority, to escalate or refer this decision to the Performance Review Group ("**PRG**") or Executive Board. Indeed, as Mr. Hall explained in paragraph 40 of his witness statement as quoted above, he did not know who made that decision, but he knew it had emanated from Alex Macintyre, the Board Director of Facilities. Currie & Brown was not privy to the internal discussions between GGC's Project Team and the Board; Currie & Brown was not in a position to know whether this decision had been made and/or approved at Board level already nor to whom it had or had not been communicated. That was a matter for Mr. Seabourne as Project Director.

17. In relation to what has been termed the Agreed Ventilation Derogation, paragraph 219 records the oral evidence of Mr. Steve Pardy of ZBP that, in respect of this derogation, "*GGC were* ***relying on*** *their technical adviser team and not ZBP*".[14] Mr Pardy's understanding of the position is incorrect as a matter of fact and law. Whilst GGC naturally sought advice on ZBP's design proposal from Wallace Whittle via Currie & Brown, the design proposal was put forward by Multiplex and ZBP. It was ZBP's proposal. ZBP was the specialist M&E engineer engaged by Multiplex, who by December 2009 had been selected as the preferred bidder for the main contract to <u>design</u> and build the hospitals. As a matter of fact, contract, and at common law GGC was relying on Multiplex and its sub-consultants (including ZBP) to produce its designs with reasonable skill and care. This passage of his oral evidence is, regrettably, symptomatic of Mr. Pardy's tendency throughout his evidence to try to divest ZBP of responsibility for its own designs and omissions. However, he cannot evade the reality that **<u>ZBP designed the ventilation system</u>**.

18. Paragraph 229 may be interpreted as implying that the comment in Item 10 of 'Technical Clarification 4' in the Bid Clarification Log was first made on 15 December 2009. In fact, Technical Clarification 4 (containing this same comment) was first issued to Multiplex in around late September / early October 2009 during the bid evaluation process.

19. Paragraph 238 says there is "*no contemporaneous record*" to the effect that the Agreed Ventilation Derogation <u>specifically</u> was "*provisional*" in that "*a change could be made to the*

[14] The reference to this oral evidence given in footnote 225 at paragraph 219 is: A53038644 - Hearing Commencing 13 May 2025, 27 May 2025 - Transcript – Steve Pardy and Stewart McKechnie, Column 40.

contract later during the design process" (albeit this would constitute a Compensation Event, the effect of which may be positive or negative in terms of financial outcome). It is respectfully suggested that the assumption underlying this comment may be mistaken. All such decisions prior to the signing of the Main Contract were essentially 'provisional' (although that is not a word that Mr. Hall used), because at that point there was no concluded design. The design was yet to be carried out and developed. It was for Multiplex and its design team to both design and build the hospitals. The design was not concluded until the instruction to proceed was issued in December 2010, a year later: see Mr. Hall's oral evidence at (Transcript, 22 May 2025, column 71). Mr. Hall further explained that:[15]

> "*This was an option about what should be included in the target price.* ***The design was still to be developed. In 2009, there was no full hospital design. There was a period of 12 months to fully develop all of the systems going through****, so in order to get to the point where we have agreement on what is contained within the target price in 2009, we have to put something in against this.*
>
> *What is reasonable to put in against that was the discussion between ZBP and Wallace Whittle, who then advised the Board on the preferred option to have as the line in the sand.* ***The following period then develops the design of the solution, and there are further discussions around the subject in the following year before it gets to instruction to proceed, at which point it is committed to****.*"

20. Therefore, what has been characterised in paragraph 238 as the "*provisional*" nature of the Agreed Ventilation Derogation was not something exceptional that needed to be separately and specially recorded; the derogation (in common with all such derogations) was by its very nature 'provisional' as a function of the fact that the design period had not yet begun.

CONCLUSION

21. Currie & Brown would be pleased to provide further information if any queries arise from this Response.

LYNNE McCAFFERTY KC
10 July 2025
4 Pump Court, Temple, London, EC4Y 7AN

[15] See (Transcript, 22 May 2025, columns 81-82).

SCOTTISH HOSPITALS INQUIRY

RESPONSE

TO

PROVISIONAL POSITION PAPER 15 – GOVERNANCE STRUCTURE

SUBMITTED ON BEHALF OF DR CHRISTINE PETERS

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1. INTRODUCTION

1.1 This response to Provisional Position Paper 15 – Governance Structure within the project to construct the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow ("PPP 15") is submitted on behalf of Dr Christine Peters. References herein to paragraph numbers are to such numbers used in PPP 15 unless otherwise stated.

2. RESPONSE

2.1 In the section of PPP 15 dealing with **"Site Selection"**, at **paragraph 88**, it states:

> *"The current view of the Inquiry Team is that based on the evidence of IPC clinicians who worked on the SGH39 and the expert evidence of Mr Bennett, there is no reason to think that the proximity of the new SGH site to the Shieldhall waste treatment site has had a direct impact on rates of infection in the QEUH/RHC, but that there is an issue about the extent to which the smell from that waste treatment site influenced decisions around the ventilation system both before the detailed design and after."*

In relation to the above view, Dr Peters submits that its accuracy depends on there being clarity on the issue of ground contamination. Accordingly, Dr Peters submits that the Inquiry should confirm that, in reaching this view, it is satisfied that it has obtained and properly considered (including obtaining any necessary expert input) all records pertaining to leakage events at the Shieldhall waste treatment site from 2000 to date.

2.2 Dr Peters notes that there is repeated reference in PPP 15 to missing minutes of meetings, e.g., at **paragraphs 192 and 227**. Missing minutes clearly bring into question whether the various governance systems were functioning properly. NHS GGC should be asked for an explanation as to why these minutes are not available. This explanation in turn should be provided to all Core Participants.

2.3 In the section of PPP 15 dealing with the **"Full Business Case"**, at **paragraph 254**, it states in relevant part:

> *"**2F. ADULT HOSPITAL (THE STRATEGIC CASE)***
>
> *...*
>
> ***Emergency Care***
>
> *...It is essential for patients with a high risk of being a source of infection to others to be managed "separately" to avoid the risk of infecting other patients. This will include; Influenza, Norovirus, Gastroenteritis, SARS, MRSA etc. This will require isolation facilities. The Infection Control Team have been fully involved in the planning of hospital to address and reduce the risk of spread infection through the design of the facilities.*

Given the above, at the stage of the Full Business Case, it was clearly intended that isolation facilities be provided as part of Emergency Care (i.e. Accident & Emergency). In order to plan for any viral haemorrhagic fever ("VHF") admissions, the inclusion of such isolation facilities was vital. It was also vital that, in order to deal with VHF, such facilities be negative pressure ventilation rooms ("NPV rooms"). As Dr Peters states at paragraph 31 of her statement to the Inquiry, no NPV rooms were provided in the entire hospital. NHS GGC should be asked to explain when and why rooms able to deal with VHF were removed from the plans?

3. CONCLUSION

3.1 In relation to the above and PPP 15 more generally, Dr Peters would be happy to provide further input, information and/or clarification as required.

Helen Watts KC and Leigh Lawrie, Advocate

On behalf of Dr Christine Peters

8 July 2025

Scottish Hospitals Inquiry – Provisional Position Paper 15
Multiplex Construction Europe Limited – Response
9 July 2025

1.1 The following is an interim response by Multiplex Construction Europe Limited ("Multiplex") to:

1.1.1 Provisional Position Paper 15 titled: *" Governance Structure within the project to construct the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow "* ("PPP15").

1.2 Having regard to Section 2(1) of the Inquiries Act 2005, Multiplex's position set out in this response is provided solely to assist the Inquiry's understanding and is without prejudice to and under reservation of any further submissions Multiplex may make or evidence it may lead in any forum.

1.3 Multiplex note that "[PPP15's] *examination of the design and construction phases of the project should…not be read as offering a view or otherwise commenting on the respective legal rights and obligations of the parties involved; its purpose is to enable the Inquiry to fulfil its Terms of Reference.*" Multiplex is grateful for this acknowledgement by the Inquiry and, in line with this approach, Multiplex does not propose to comment on the Inquiry's commentary on the interpretation and proper meaning of the Building Contract.

1.4 Multiplex further notes the terms of PPP15, where the Inquiry highlights the importance of parties understanding the factual basis on which the Inquiry is proceeding and having the opportunity to correct any misunderstandings or misapprehensions.

1.5 Multiplex notes that at paragraph 137 of PPP15, it is set out that:

> "*It is the Inquiry Team's provisional submission that a reader of the OBC would assume that SHTM 03-01 was being complied with. The OBC stated the hospital would provide "the highest quality and safety standards" and be designed with "best practice in terms of infection control principles". The OBC also referenced compliance with 'A Policy on Design Quality for NHS Scotland'. That policy included a requirement for health boards to use ADB; extreme care was recommended for Scottish users to ensure ADB was compliant with SHTMs. The policy also stressed the need to follow SHFN 30.*"

1.6 Respectfully, Multiplex do not understand how this can be the case. As has been noted elsewhere in PPP15 (see for example paragraph 46), the OBC for the QEUH was submitted in February 2008 and was approved in April 2008. The first, draft, version of SHTM03-01 was not published until April 2009. The OBC could not therefore have been written with the terms of SHTM03-01 in mind. Any person who was reading the OBC at the time would likewise not have considered that a document which did not exist at the time would be complied with. It would also be a demonstrably incorrect conclusion for any later reader to assume that SHTM03-01 had been considered in the preparation of the OBC.

1.7 Multiplex is happy to discuss this response with the Inquiry team if it would be of assistance.

11 July 2025

For the attention of Inquiry Team
Scottish Hospitals Inquiry

By email only: legal@hospitalsinquiry.scot

Our Ref: TUVS/2/5

Direct e-mail: [redacted]

Dear Sirs,

TUV SUD Limited/Wallace Whittle Limited ("TSWW")
QEUH and RHC Glasgow
Response to Provisional Position Paper 15 – Governance Structure within the project to construct the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Introduction

1. TSWW welcomes the opportunity to comment on Provisional Position Paper 15 ("PPP 15"), setting out the Inquiry's understanding of, firstly, governance structures and decision making within NHS GGC and the Scottish Government from project inception to contract signature and, secondly, the form and substance of the Full Business Case ("FBC"). We have considered PPP 15 with our client. TSWW will respond solely to the points which are within our client's direct knowledge and which we can substantiate.

2. As a preliminary matter, the importance of the chronology of TSWW's involvement in this project cannot be overstated. Two points require to be emphasised.

3. First, in September 2008 NHS GGC appointed Currie & Brown as Lead Consultant to a Technical Advisory Team. Wallace Whittle was thereafter appointed by Currie & Brown as a sub-consultant. At the conclusion of the tender exercise in December 2009/January 2010, following instructions from the NHS GGC Project Team, Currie & Brown stood down their technical advisory team, including Wallace Whittle. Thereafter, Wallace Whittle engaged with Currie & Brown on an ad-hoc basis resulting in the Environmental Matrix Review in 2010, with Wallace Whittle's final involvement being in November 2010. In particular, it is important to recognise that this review recorded that the information available to Wallace Whittle was incomplete with MPX indicating that these design details would be finalised at the detailed design stage – and thus, very importantly, such detailed design matters had **not** been commented on by Wallace Whittle at that stage (November 2010).

4. Second, the Inquiry is aware that Wallace Whittle was subsequently acquired by TUV SUD in July 2011 becoming TUV SUD Wallace Whittle ("TSWW"). The building services design for QEUH/RHC was awarded to Brookfield/Multiplex ("MPX") in December 2009 and MPX engaged Zisman Bowyer & Partners LLP ("ZBP") as M&E sub-contractors. ZBP ceased trading in 2013, with TSWW taking over a number of its assets and contracts. As a result, MPX thereafter appointed TSWW to assist with project completion, at a point **after** the detailed design phase had already been completed and reviewed.

5. Thus, at **no** stage was either Wallace Whittle or TSWW ever involved in the detailed design of the project.

6. While we appreciate that the Inquiry does not focus on the contractual obligations of the parties involved, we would like to clarify that throughout the project both Wallace Whittle and TSWW functioned exclusively in their respective capacities as sub-consultants and sub-contractors to Currie & Brown and MPX. At no point - from the inception of the QEUH and RHC Glasgow up to and including its continuing operation - did Wallace Whittle or TSWW have a direct contractual relationship with the primary employer, NHS GGC. Instead, both Wallace Whittle and TSWW operated one step removed from NHS GCC, reporting solely to either Currie & Brown and/or MPX, who were their direct employers. Significantly, as sub-consultants and sub-contractors, Wallace Whittle and ZBP/TSWW were not required to report on any ventilation strategy, nor provide documentation or advice, directly to NHS GGC. This responsibility simply did not fall within the scope of work of Wallace Whittle or TSWW. Their obligations were limited to fulfilling the tasks assigned by either Currie & Brown or MPX, and any reporting or documentation requirements were directed to their immediate employers, not NNHS GGC. As such, it is TSWW's position, with particular regard to PPP15 paragraphs 216-238, that they complied with their obligations in their consideration and circulation of the ZBP Ventilation Strategy Document and in providing follow up comment on this document. Any failure in the communication of any elements of the considered ZBP Ventilation Strategy Document to NHS GGC did not fall to either Wallace Whittle or ZBP/TSWW. To the extent that there was any such failure (and it is not clear to us that there was any), this responsibility lay with their direct and respective employers, namely Currie & Brown and MPX.

The ZBP Ventilation Strategy document

7. Having set TSWW's response in context, we now turn to PPP 15's treatment of the ZBP Ventilation Strategy Document.

(1) Air Changes

Non-conformance a decision for NHS GGC

8. It should be noted at the outset that the ZBP Ventilation Strategy Document acknowledged in clear terms (see page 1 of the document) that the recommended A/C rate for general single bedrooms as reflected in SHTM 03-01 was a rate of 6A/C per hour. The document proceeded to set out an explanation of why, given NHS GCC's requirement for a maximum temperature level of 26°C, achievement of the 6 A/C rate was considered "impractical". That conclusion does not seem to have been disputed by anyone (then or since). The document also made it clear that a A/C rate lower than the SHTM guidance was being proposed (see the last paragraph on page 2 of the document). In these critical respects, the ZBP document was unambiguous.

9. Wallace Whittle, acting in their capacity as sub-consultant to Currie & Brown, were consistent in pointing out that the proposed air change rate of 2.5 A/C for general single bedrooms did **not** conform with the SHTM-03-01 guidance. This is evidenced in correspondence sent to Currie & Brown by Mr John Bushfield on 9 December 2009 in response to the Bidder's proposal[1] and by Mr McKechnie on 15 December 2009 in response to sight of ZBP Ventilation Strategy Document.[2] It is therefore absolutely clear that Currie & Brown were put on notice by Wallace Whittle that the proposed 2.5 A/C rate did **not** conform to the available guidance. It is also clear that NHS GCC were ultimately well aware of the non-compliance. That is reflected in the entry in the so-called Clarification Log to the effect that: "Ward air change to be 6 AC/HR, currently shown as 2.5 AC/HR which is **not** in compliance with SHTM 03-01" (emphasis added).

[1] A48743262 – NSGH – Contract Preparation Design Summary Brookfield Response – 09 December 2009 – Bundle for Oral hearing commencing 13 May 2025, Bundle 43, Volume 2, Document 21, Page 311.
[2] A48705259 – Email chain – R Ballingall, M Baird, S McKechnie – Ward Ventilation Design Strategy – Air changes – 15 to 16 December 2009, Bundle for Oral Hearing commencing 19 August 2024, Bundle 17, Document 72, Page 2863

10. It is critical to recognise that Wallace Whittle's Mr McKechnie did what he should have done in the circumstances pertaining as at December 2009 – namely, he clearly identified that there would be a non-compliance with the guidance if the ZBP proposal was adopted (which was of course something which ZBP had themselves acknowledged in their strategy document). Furthermore, it is TSWW's position that Wallace Whittle's comments in December 2009 which noted the divergence between ZBP's proposed 2.5 A/C rate and the guidance rate of 6A/C, was simply that, namely comments on a technical matter. As a sub-consultant, it was not within Wallace Whittle's powers or role to make any decision on behalf of NHS GCC or to alter the latter's requirements. Instead, the decision whether to proceed with a 2.5 A/C rate was one to be made by NHS GGC in light of: (a) its requirement for a maximum temperature level of 26°C; (b) its requirement that the energy efficiency target/BREEAM objectives had to be met; and (c) the explanation set out in the ZBP Ventilation Strategy Document.

11. For completeness, TSWW would like to emphasise to the Inquiry that Mr McKechnie's comment on the Bidder's proposal in his email of 15 December 2009 timed at 10:04 that: *"On ventilation we see this as a sensible, practical solution and Energy efficient although it doesn't strictly comply with the SHTM…"*[3] is uncontroversial in nature. In context, the ZBP/Bidder's proposal of a 2.5 A/C rate was a reasonable suggestion for the following reasons generally identified in ZBP's strategy document.

a. Site selection

12. As a result of the site selection with an adjacent operational sewage works, the QEUH was to be a fully sealed hospital, with no opportunity for the preferred route of natural ventilation. Accordingly, MPX/ZBP proposed the rate of 2.5A/C in conjunction with the use of chilled beams. The effectiveness of the chilled beams required a specific quantity of air, being 40 litres per second, which in turn demanded a lower air change rate.[4] These matters were explained in the ZBP strategy document and also reflected in the relevant entries in the Clarification Log. NHS GCC can have been in no doubt about these matters. They were spelt out in words of one syllable, as it were.

b. Single bed occupancy in general wards

13. As the general bedrooms were to be single occupancy use, the combined provision of 2.5 A/C and active chilled beams would therefore ensure provision of a controlled and consistent air supply that even a naturally ventilated room would have struggled to consistently maintain. It is important to note that, at the time, the 2.5 A/C rate and supply air volume of 40 litres per second aligned with guidance regarding minimum fresh air requirements in relation to occupancy levels. [5]

14. In this regard, TSWW would also like to stress that the proposed rate of 2.5 A/C was discussed in relation to single bed general wards only.

c. Removal of the maximum temperature variant

15. As recognised by the Inquiry, the 2.5 A/C rate is clearly linked to NHS GGC's decision to reduce the maximum temperature limit from 28°C degrees to 26°C.[6] Where the maximum temperature is lowered, the hospital ventilation system must utilise more energy in the form of cooling to the building in order to achieve the lower temperature. The more air that is required to be cooled (or heated in winter) the greater the amount of energy that is used. Given the challenging energy consumption target mandated by NHS GCC, Brookfield/Multiplex were obviously cognisant that this was a requirement for NHS GGC. Indeed, NHS GGC's "Removal of Mandatory Maximum

[3] Ibid.
[4] A53038644 - Hearing Commencing 13 May 2025, Day 8, 27 May 2025 Steven Pardy and Stewart McKechnie, Column 25
[5] SHTM 2025 Part 2, v2 June 2011 at 3.16
[6] As evidenced in ZBP Ventilation Strategy Document, Bundle 43, Volume 5, Document 96, Pages 785 and 787

Temperature Variant" direction issued on 8 June 2009 noted that: *"Sustainability has a major input into the project and all solutions **must** seek to minimise CO2 and energy usage…"* (emphasis added), caveated only that this was not to be at the expense of patient comfort.[7] This is where the adoption of a lower A/C rate than the SHTM guidance was highly relevant. In this regard, it is very significant that in her final witness statement Mary Ann Kane's answer to the Inquiry's question, as to whether it was possible to incorporate a comprehensive ventilation system into QEUH/RHC, is as follows:

> *"…I was advised by Mr Powrie and Mr Gallacher that ventilation air change rates had been **sacrificed** to achieve BREEAM excellent and **that the Board had derogated Ventilation standards as a result**…"* (emphasis added)[8].

16. It is clear from this that a conscious and deliberate decision was made by NHS GCC staff that the achievement of BREEAM compliance was to be preferred over what might otherwise have been applicable ventilation standards (and, in particular, the 6 A/C rate indicated by relevant SHTM guidance).

17. TSWW notes that NHS GGC's direction to lower the maximum temperature threshold and therefore depart from the SHTM guidance does not appear to have passed through the appropriate channels for approval, such as the Board.

18. Furthermore, TSWW would like to emphasise to the Inquiry that at **no** point were Wallace Whittle (or TSWW) ever consulted on NHS GGC's decision to lower the maximum temperature variant, nor asked what potential implications could arise. We note that NHS GGC's decision to depart from the guidance has not been described as a derogation from SHTM-03-01.

d. The provisional nature of the ZBP Strategy Document

19. Crucially, the December 2009 ZBP Ventilation Strategy Document was never intended to be definitive. The document allowed for negotiations to progress and, ultimately, contract signature on 19 December 2009. The provisional nature of the document was spoken to throughout Core Participants' oral evidence in Glasgow IV Part I hearings. Significantly, it was a document that was intended to be revisited upon the undertaking of the full design process. In other words, the ZBP strategy document cannot legitimately be regarded as the final word. Rather, what was proposed was always going to be subjected to the detailed design process.

20. That said, it is clear that the 2.5 A/C proposal was indeed sensible and practical in the context of the QEUH and RHC and the requirements which NHS GCC had stipulated.

21. This does not detract, however, from the incontrovertible and critical fact that Wallace Whittle advised Currie & Brown in December 2009 that the proposed 2.5 A/C rate did **not** conform to guidance. In short, Wallace Whittle provided appropriate technical comments, including identifying that the proposed A/C rate did not comply with the guidance. It was then up to NHS GGC to make its decision, assuming the Wallace Whittle comments had been passed to NHS GGC by Currie & Brown.

22. The conclusion is that NHS GGC was an informed client. Indeed, this cannot seriously be disputed given the relevant entries in the Clarification Log where the relevant points were summarised.

23. Further, and in any event, TSWW comments that, if the Inquiry were to make a finding that the agreed ventilation solution producing a rate lower than 6A/C is open to criticism and/or inappropriate, this would require it to identify, on a proper basis in the evidence (and in light of (a) NHS GCC's requirement for a maximum temperature level of 26°C; (b) its requirement that the energy efficiency target/BREEAM objectives were to be met; and (c) the explanation set out

[7] A33010775 – Removal of Mandatory Maximum Temperature Variant – June 2009, Bundle 17, document 26, Page 1063

[8] Mary Ann Kane – Statement – Final Glasgow 4 Hearings, page 113

in the ZBP Ventilation Strategy Document), that a 6 A/C rate was achievable and should have been achieved. There is no body of evidence allowing such a conclusion. Given the requirements of the NHS GCC, the 6 A/C rate could not be achieved and thus could not have been appropriately adopted (unless NHS GCC changed its requirements). Put another way, it is only if the requirements imposed by NHS GCC had been changed that the 6A/C rate would have been achievable (and thus an appropriate element of the design). It is not in dispute that NHS GCC's requirements were never changed.

24. Moreover, if the Inquiry were to conclude that a 6 A/C rate was required in all circumstances, it should understand that this would undoubtedly have far-reaching consequences across the NHS in Scotland where modern hospitals have been designed with naturally ventilated bedrooms. Natural ventilation cannot guarantee reaching a 6 A/C per hour rate, and nor can there be any consistency in achieving that level even if it is achieved on occasion, owing to the inherently variable nature of natural ventilation.[9] The result, in this scenario, could be that considerable public alarm could be caused in relation to the NHS estate across the country as a whole, and on an unjustifiable basis.

(2) Design development timeline

25. It is respectfully submitted that the provisional nature of the ZBP Ventilation Strategy Document requires the Inquiry to shift its focus to the various stages of the design development process (i.e., the review of the detailed design ("RDD") process) of the QEUH project. It is in this context that questions regarding ventilation, in respect of both general and specialist wards, are most appropriately addressed. In this connection, it should be remembered that post-contract signature, Wallace Whittle had limited involvement with the QEUH project, with Currie & Brown being stood down by NHS GGC as lead technical consultant in January 2010. As above noted, Wallace Whittle's final involvement with Currie & Brown was in November 2010. This is significant as it demonstrates that NHS GGC had **no** active M&E consultants working on the project throughout the design development process in the period from post-contract signature up to the point of the hospital opening for patients.

26. From the perspective of Wallace Whittle/TSWW, it is also critical for the Inquiry to note that after Wallace Whittle stepped out of involvement as at November 2010, it was not until March 2013 that Wallace Whittle were appointed to complete such M&E tasks as still fell to be carried out on behalf of Multiplex. But by March 2013 the process of detailed design had long since been completed. That process finished in 2012 with construction drawings thereafter being issued (also in 2012). To be clear, neither Wallace Whittle nor TSWW played any part in the detailed design process relative to M&E matters on the project.

27. Beyond these points, we wish to draw the Inquiry's attention to the following elements of the RDD process. -

(a) Clinical output specifications

28. As the Inquiry heard in Emma White's oral evidence, the clinical output specifications (the "COSs") were NHS GGC department specific creations which were developed at the beginning of the bidding invitation. As the level of detail contained within a COS is dependent on that provided by each department, there are varying levels of consistency. This presents an immediate issue, as the COSs are the only piece of information provided to the contractor to describe the particular service which is to be delivered to the specific department.[10] Furthermore, the Employer's Requirements (the "ERs"), issued to bidders, are informed by the COSs. This demonstrates the pressing requirement for clinical users and the informed client to provide in depth information pertaining to the needs of the various prospective department users. The COSs are also used to inform the standard room codes (ADB sheets) which require to be adapted by the contractor's architect.

[9] ZBP Ventilation Strategy Document, Bundle 16, Document 21, Page 1657 - 1658
[10] Hearing Commencing 13 May 2025, 27 May 2025, Transcript – Alan Seabourne, Column 37

(b) User Group Meetings and the Architects Drawings

29. The User Group Meetings (the "UGMs") took place between March 2011 and July 2011, after FBC. The purpose of the UGMs was to enable collaboration regarding detailed design between NHS GGC and the contractor. NHS GGC Project Team member Francis Wrath confirmed that her role was to extract the relevant information from the user groups to provide to the architect, Nightingale, likening her role to being the architect's "interpreter".[11] Rounds of UGMs were held to extract information for the benefit and use of the contractor's architect, Nightingale, which thereafter developed and passed on the 1:200 and 1:50 room drawings to Mercury and ZBP. It is important to note that ZBP could not begin to progress its designs until receipt of the 1:50 drawings in mid-2011.

30. Wallace Whittle was not involved in any way with the UGM process. Nor was TSWW involved either.

(c) RDD reviews of the ventilation proposals

31. The reviews of ZBP's detailed ventilation proposals on a room by room basis were undertaken during 2011/12. Until the relevant drawings were produced there was no possibility of any detailed interrogation of the ventilation being proposed.

32. This is not unusual and would be the natural point where the review process would consider the designer's proposals against the ultimate client's expectations. Generally speaking, TSWW would expect that this final review stage would ensure that all previous comments and/or departmental specific requirements had been satisfactorily addressed.

<u>Concluding Points</u>

33. Our clients have provided the above-noted response to PPP 15. We trust that the contents of this letter will be taken into account by the Inquiry and given due and careful consideration.

Yours faithfully,

[redacted]

Laura Donald
Consultant
For and on behalf of BTO Solicitors LLP

[11] Hearing Commencing 13 May 2025, 14 May 2025, Transcript – Francis Wrath, Column 9

PROVISIONAL POSITION PAPER 15

Governance structure within the project to construct the Queen Elizabth University Hospital and the Royal Hospital for Children, Glasgow

1. Paragraph 10 of Provisional Position Paper 15 (PPP15) states that in due course it is likely that the Chair will be invited to make findings in fact based on its content. Core participants may seek to correct and/or contradict PPP15. The Scottish Ministers wish to take that opportunity as regards matters narrated in the section entitled "**Changes to Governance Structures 2009**" at paragraphs 166-172.

2. The narrative in this section is incomplete. To the extent that it implies that Michael Baxter, Deputy Director (Capital Planning and Asset Management), Health and Social Care Directorate, Scottish Government, was a voting member of the New South Glasgow Hospitals and Laboratory Project Executive Board ("NSGHLPEB") throughout the project, PPP15 is inaccurate. The following chronology is relevant in that regard:
   (i) The Terms of Reference for the NSGHLPEB in June 2009 provided that Mr Baxter was a voting member of that Board.
   (ii) A minute of the NSGHLPEB meeting on 7 December 2009 [Bundle 42, Vol 2, pp88-91] minutes governance changes as the project moved from planning to implementation. The minute records that Mr Baxter had requested that he attend the NSGHLPEB in an observation role.
   (iii) That change in Mr Baxter's role was accepted. This is recorded in Bundle 42, Vol 2 at pp98-115 referring to a NSGHLPEB meeting of 16 February 2010.
   (iv) From around February 2010 Mr Baxter attended as an observer member of the Acute Services Strategy Board.

SCOTTISH HOSPITALS INQUIRY

Bundle of documents for Oral hearings commencing from 16 September 2025 in relation to the Queen Elizabeth University Hospital and the Royal Hospital for Children, Glasgow

Bundle 50
Core Participants responses to Provisional Position Paper 15 - Governance