

## SCOTTISH HOSPITALS INQUIRY

# Hearing commencing on 24 April 2023 Bundle 2 - Reference Design and Invitation To Participate in Dialogue ("ITPD") Documents

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3.1

#### **LOTHIAN NHS BOARD**

Finance & Performance Review Committee 12 January 2011

Director of Finance/Chief Operating Officer

## ROYAL HOSPITAL FOR SICK CHILDREN & DEPARTMENT OF CLINICAL NEUROSCIENCES REPROVISION PROJECT UPDATE

#### 1. Purpose of the Report

1.1. The purpose of this report is to provide the Finance & Performance Review Committee with an overview of the progress made over recent weeks to review the Royal Hospital for Sick Children (RHSC) and Department of Clinical Neurosciences (DCN) reprovision projects, following the Scottish Government announcement on 17 November 2010 that these projects would be funded under the Non Profit Distributing (NPD) model.

#### 2. Recommendation

#### 2.1. The Committee is invited to:

- Approve the (previously agreed) preferred option for a combined facility for the Department of Clinical Neurosciences and Royal Hospital for Sick Children.
- Approve progressing with a detailed reference design for a combined project as a key component of the NPD procurement route utilising either the current Framework Contract with BAM or by procuring the design team through the Office of Government Commerce (OGC) procurement solution.
- Note that a recommendation based on legal advice for procuring the Reference Design will be available for Committee members at the meeting.
- Approve the commencement of a tender process to appoint advisors (technical, legal and financial) in addition to the advisory assistance provided by SFT.
- Note that the initial estimate of the cost of advisors is £10m and we have written to SGHD for confirmation of financial support for this.
- Note the agreed action with Consort to urgently conclude the land transactions with Consort
- Note we are awaiting a response from Scottish Government Health Directorates and Health Facilities Scotland regarding indemnifying us

from any costs that arise from the termination of the Frameworks Scotland contract for RHSC.

 Note that the proposed structure of the project team and a more detailed assessment of additional advisor costs will be bought back to the Committee in February.

#### 3. Summary of the Issues

- 3.1 The Scottish Government Draft Budget published on 17 November 2010 set out proposals to take forward a number of capital infrastructure developments across Scotland using a 'revenue funded' model. This is largely indicative of the significant reduction in the level of public capital available across Scotland
- 3.2 Both the RHSC and DCN projects were specifically highlighted as projects to be procured under the revised funding model, of a Non Profit Distributing (NPD) organisation.

"The new pipeline of NPD investment will help support key projects across core public services, including:

- Health projects, the Royal Sick Children's Hospital and Department of Clinical Neurosciences in Edinburgh (c£250m)"
- 3.3 This has brought a number of significant challenges, as well as complex legal, technical and procurement issues, given the existing relationships with our key commercial partners: BAM, as Principal Supply Chain Partner under Frameworks Scotland; and Consort Healthcare, as the PFI provider on the Little France site with a legal right to the land under the structure of the existing Project Agreement. Further details on progress are set out in the sections below.

#### 4. Background on NPD

- 4.1. An NPD (Non Profit Distributing) project is a distinct type of Public Private Partnership (PPP). Under an NPDM (Non Profit Distributing Model) or NPDO (Non Profit Distributing Organisation), a private company limited by shares is established (the Special Purpose Vehicle or SPV) to enter into a design, build, finance and maintenance contract with the public sector body. There is private sector participation and expertise to deliver public sector infrastructure, but unlike traditional Private Finance Initiative (PFI) Projects, the organisation's profits cannot be distributed in the usual way and must be reinvested by the organisation. The model aims to retain the benefits of revenue finance such as optimal risk allocation between the public and private sector partners and performance based payments, while removing the potential for excessive profits.
- 4.2. To date, there is only one NPD project underway in NHS Scotland a mental health development in NHS Tayside. Dialogue is already underway with colleagues in NHS Tayside, in particular to highlight any 'lessons learned'.

- 4.3. The key features of the current NPD model are:
  - Traditional benefits of PPP with regard to risk transfer
  - There is a fixed or capped return to investors
  - Greater stakeholder involvement in governance through the appointment of a Public Interest Director and Stakeholder Director<sup>1</sup> onto the SPV; although it is always the intention that the private sector carry the majority of votes
  - There is no dividend bearing equity funding
  - Debt funding is c. 90/10 senior/junior split
  - Refinancing can only be instigated by the Public Interest Director, although there is often a moratorium period, within which time a junior debt refinancing cannot be 'forced'<sup>2</sup>
  - Any profit made is returned to stakeholders rather than shareholders; this return is made in the form of a donation to charity, or back to the client.
- 4.4. The Scottish Futures Trust (SFT) is to take a central role in the capital infrastructure programme across Scotland, and will provide advice and guidance on all NPD projects, of which a pipeline of projects is now anticipated. One of the key matters to be clarified is the explicit roles and responsibilities of SFT and the distinct Board appointed technical, legal and / or financial advisors.

#### 5. Progress to Date

- 5.1. Immediately following the Budget announcement contact was made with Scottish Futures Trust by the Director of Finance and a meeting took place with the Chief Executive of SFT on the 23 November 2010.
- 5.2. Since then a number of meetings have been held with representatives from the Scottish Government Health Finance Directorate and SFT, as well as ongoing dialogue with our current legal advisors MacRoberts and Health Facilities Scotland (HFS) as managers of Framework Scotland. One of the key reports is the preliminary legal opinion obtained from MacRoberts which, at the time of writing, is being reviewed by HFS advisers.
- 5.3. The Business Case for the DCN development, approved by the Board in the November 2009 recommended the preferred and best clinical option as a combined build with RHSC. This has been reaffirmed by the outcome of a non financial benefits appraisal undertaken on 16th December 2010. The total weighted scores for the benefits each option would deliver are summarised below.

-

<sup>&</sup>lt;sup>1</sup> The Stakeholder Director on the only existing NDP Project in NHS Scotland (Tayside Mental Health Developments) is the NHS Board Director of Finance

<sup>&</sup>lt;sup>2</sup> Tayside Mental Health Development has 10 year moratorium

	OPTION 1	OPTION 2	OPTION 3
	New build extension and some existing RIE	Embedded into current RIE, no new build	Joint build with new RHSC
Total weighted scores:	286.5	190.1	372.4

This is consistent (in relative terms) with the previous non-financial benefits appraisal undertaken in September 2009, for options 1 (420.8) and 3 (324.2), option 2 was not included at that time.

- 5.4 The Key Benefits/Objectives of the combined development over other Options were set out as follows;
  - (i) Minimal disruption to RIE clinical services during enabling works, construction and commissioning stages.
  - (ii) Greater certainty for delivery within expected operational timescales for West of Scotland Neurosciences (Paediatric and Other).
  - (iii) Less disruption to RIE Infrastructure during construction.
  - (iv) Ability to provide a more energy efficient facility and working environment.
- Our current Professional Services Consultants and Principal Supply Chain Partner managed under Framework Scotland conditions have completed initial feasibility work around the single development in "Car Park B" of a combined Royal Hospital for Sick Children and Department of Clinical Neurosciences. This study reported on 24 December and concluded that whilst in principle this proposed development is feasible, there are challenges when compared against the previous standalone RHSC on Car Park B at Little France. However, in addition to meeting the clinical objectives included in the non-financial option appraisal, summarised above, the new procurement of a combined build also avoids the procurement challenge and value for money risks inherent with works only delivered through Consort as part of the RIE, without competitive test.
- Work has now started on the approved new car park on the BioQuarter Plots 14-16 (designated now as car park F) and Consort have been engaged to deliver the enabling works at Car Park B and F. Although separately appointed, both are being constructed by Balfour Beatty Construction. The weather had delayed the physical start on site for car park F. The programme and scope of enabling works in and around car park B will also be amended to accommodate an anticipated revision to the footprint and services for a combined building.

5.7 The land transaction remains to be concluded but is agreed in principle with Consort. The legal teams are currently agreeing the terms of a "like for like" swap, and the definition of the site (for a combined build) is being agreed with Consort. It is planned to achieve an exchange of missives by the end of March with the conclusion of sale taking place following independent valuation of Car Park F once construction is complete. In parallel Consort are in discussion with their funders to secure their sign off. The clear advice from SFT is that the next formal stage of the project procurement cannot proceed until the leasehold interest is renounced by Consort in exchange for the new interest in Car Park F i.e. the land transaction is concluded.

#### 6. Procurement Options

- 6.1 We have an objective to minimise both the delay to the programme (also the Cabinet Secretary's aspiration) and the abortive and on-going costs; to ensure operational effectiveness going forward, and also to manage the overall site consistent with the aims of the BioQuarter development.
- 6.2. To achieve this, we have explored the procurement options with both SFT and SGHD, for a NPD model to deliver RHSC and DCN with our ideal being to have utilised the existing design team to complete the design process, build on the market testing of packages already undertaken and construct the new building (option 2, below).
- 6.3 A series of queries on the options, were posed to our legal and technical teams. The output limited the options as follows:

#### Option 1

**HUB** 

This has been ruled out as a delivery mechanism following discussions with SFT. It has no attractions other that lead time for procurement.

#### Option 2

Utilising the PSCP and Framework Scotland with NPD (Finance and / or Lifecycle and Operational services) wrapped around / onto the contract:

This option essentially "novates" the BAM contract to a newly procured SPV which would then deliver the construction. However, the advice received indicates that the variance between the NEC3 (Frameworks Scotland form of contract) and the NPD design and build form of contract is too significant. It would require a considerable period of time to restructure or create a new vehicle to transfer the risks, address termination terms and associated costs to an NPD form. This route is untested and also carries a risk of accounting complications regarding design and construction risk transfer, of a procurement challenge and demonstrating value for money.

#### Option 3

Continue to work through the Framework Contract to complete a "Reference Design" for the combined build for an open SPV procurement to pick up and then deliver construction, operation, etc:

This has the attraction of market testing the NPD and has emerged as the "balanced" answer, but within that there are a number of remaining issues.

- Indicative legal advice based on MacRoberts (and their independent review of the Framework Scotland contracts) is that the termination of the PSCP contract and securing the use of the design is not free from doubt. This relates to the ability to secure a clean termination without compensation or adoption of the design through licences out with the Framework. The written legal advice has been taken to Health Facilities Scotland, as the Framework Scotland 'Host', for verification Alternative routes to potentially secure the design team outwith Framework Scotland is also being explored and will be clarified in early January. An update will be provided at the Finance & Performance Review Committee meeting on 12 January.
- Requirement during a competitive dialogue phase and / or pre-financial close to re-engage on design options from bidders will lead to further service pressures on a limited pool of key clinicians. Our view is that a reference design model would assist in mitigating this and it is our intention to take this route, as far as possible.
- In terms of providing a level playing field for the wider marketplace (of which there is expected to be good interest) there are conflicting views around the residual interest position of BAM and the ongoing site interests of Consort. For example, a concluded design could leave BAM with a considerable insight into client requirements over other players. We cannot separate the Architects from BAM as principle supply chain partner unless as part of a separate appointment. In parallel, the option of a separate appointment of the Design Team through the office of Government Commerce Buying Solutions is also being explored.
- The initial high level financial analysis from SFT indicates a revenue cost
  of circa £25m pa for a larger scale RHSC/ DCN combined development at
  a capital cost of approximately £250m. It will be important to understand
  how the value of the revenue stream to support this development will be
  agreed and a formal request has been submitted to SGHD. It is
  understood that greater clarity on financial support will be available around
  the end of January from SGHD.

- 6.4 A review meeting including SFT, SGHD and MacRoberts to consider options 2 and 3 took place on the 23 December. Following consideration of the issues and advice received to date, it has now been concluded that the recognised route for NPD procure is to take a "reference design" to the market (i.e. option The key outstanding issue is whether this should be developed by extending the BAM Framework contract or by utilising the OGC Framework Contract (which includes the existing design team). Both our lawyers and those of Health Facilities Scotland, who oversee Framework Scotland are due to meet on Monday 10 January and a summary of the position and recommendations will be available for the meeting on the 12 January. Although this decision requires to be made by NHS Lothian as the Statutory Authority it will be important that this is endorsed by SFT and SGHD. It is proposed that if this is to be via the BAM Framework Contract, the additional work (estimated £2m) is offered to BAM on the condition that any right to the design are conceded. The funding will require to be secured with SGHD.
- 6.5 It is worth noting, that for operational effectiveness, having one PPP provider on site, particularly for lifecycle maintenance, hard FM and an extension of service contracts over the whole enlarged site, would reduce the complexity of contract management. However, this cannot prevent meeting the procurement requirements of a level playing field.

#### 7. Timetable implications

7.1 Early SFT advice indicates that there could be up to months programme delay with associated costs. We are doing all we can to ensure that any delay is minimised, and believe that the project can be completed by 2015. A key target is to conclude the agreed way forward with the Board in March.

#### 7.2 NPD process

The key aspects of the NPD process include:

- Advertise to the marketplace for Special Purpose Vehicle the advice from SFT is to ensure that the robust client output requirements and associated contract information is fully in place prior to advertising and engaging with the private sector. This will require expert input from both in-house staff and external advisers.
- **Soft market testing** this work will require to be undertaken to meet both project programme and also similar activity underway in the UK to ensure adequate interest in the project and a level playing field for suppliers.
- Competitive dialogue this involves each bidder having the opportunity to discuss the Board's requirements and their proposals in an intensive and structured manner; requiring suitable resources and time

7.3 We will continue to work with both SFT and SGHD to agree the appropriate procurement approach. However, one of the key pieces of advice from SFT and other parties is to ensure the support of appropriately experienced team and technical advisers at an early stage. This is also essential for the development of the Reference Design. It is our aspiration to progress this immediately but with a likely financial cost over the whole development process of a project of circa £10m for advisors and design (a considerable amount of design work already having been completed and if utilised will reduce additional costs). Confirmation of financial support for this from SGHD is essential, and we have written to them on this issue.

#### 8. Consort Position

8.1 As part of their engagement, Consort have suggested a potential route through the delivery on going of the development through a Joint Venture with Consort Healthcare – including the use of BAM to construct – and an NPD model. They believe that the land under lease gives them a controlling special interest negating the need for open procurement. Consort has agreed to continue to work towards concluding the missives for the land transaction but will also propose developing a proposition for a Joint Venture, by mid January. This will be considered jointly by us, SFT and SGHD. This option will also need to be considered against the potential difficulty of demonstrating value for money for such a large development. However, the priority remains securing the land transaction.

#### 9. Next Steps

#### 9.1 Immediate priorities

- Conclude land transaction with Consort.
- Agree the procurement of the Reference Design.
- Appoint advisors (legal, technical, financial). The project and design team currently engaged through HFS Frameworks for the standalone RHSC have effectively been "stood down" awaiting confirmation of a future role. Inevitably, expertise will be lost to other projects in the early part of 2011 should NHSL not be in a position to re appoint.
- The roles and responsibilities within the project Delivery Team and Project Boards will require to be reviewed. Work on this is now underway to identify the areas for support, taking account of the input of advisors, and the potential availability of funding from SGHD to cover these costs.
- All knowledge and information produced through the standalone RHSC design process is being captured for future use and consists of all design data at point of suspension, technical validation information, briefing data, cost data and construction information.

Royal Hospital For Sick Children and Department of Clinical Neurosciences

Advisory Paper 02: Reference Design Development

February 2011

Mott MacDonald Limited Caledonian Exchange 3rd Floor 19a Canning Street Edinburgh EH3 8EG United Kingdom T +44(0) 131 221 2300 F +44(0) 131 221 2399 W www.mottmac.com

## Royal Hospital For Sick Children and Department of Clinical Neurosciences

Advisory Paper 02: Reference Design Development

#### Issue and Revision Record

Rev	Date	Originator	Checker	Check Ref Completed	Approver	Description
0	7 Feb 11	RDC	AGS		IWC	Issue

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#### 1 Introduction

The Royal Hospital for Sick Children and Department of Neurosciences Project (the "Project") has been developed over the past two years under Procurement Scotland arrangements with the intention that the Project would be delivered as a capital funded project. The Project had been developed with a view to the Project commencing construction in Q2 2011. A design has been developed by BAM Construction in conjunction with the user groups and has had full sign off of the proposals. As a result of the Scottish Government Spending Review in November 2010, the Project was confirmed as to be delivered using the Not for Profit Distribution Model (NPD) which from a technical and whole life cost perspective is similar in nature to the PPP model. As part of this decision, the scope of the Project was revised to also include the Department of Clinical Neurosciences.

For the NPD procurement process, a Reference Design is required to be developed on behalf of the Board. The work done to date cannot be used in its current state for the Reference Design since (i) it reflects only part of the Project; (ii) it has a strong D&B emphasis; and (iii) may reflect BAM construction preferences. Therefore further development of the design is required. This further development will be carried out in conjunction with the user groups to get their sign off of the revised design. In absence of any formal guidance, the Board need to decide to what extent the Reference Design will be developed and how it will be used.

This advisory paper reviews the following issues relating to the development of a Reference Design for the Project:

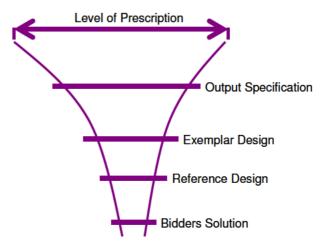
- the historical approach to developing exemplar designs on PPP projects;
- the suggested approach to be adopted for the use of the Reference Design on the Project;
- the level of development of the Reference Design considered to be appropriate for the Project;
   and
- the procurement status of the Reference Design and extent to which it is mandatory or for information.

For the purposes of this paper, the definition of both an exemplar design and a Reference Design is as set out below:

Exemplar Design – a design developed by the procuring authority that represents one example or solution to the output specification.

Reference Design – a design developed the procuring authority that represents a specific solution to the output specification, the key features (and potentially other areas) of which the procuring authority wish to see in the final design.

Both an Exemplar Design and a Reference Design represent a springboard for the bidders to develop their own designs however the level of prescription and fixity in the case of the Reference Design is greater.



#### 2 Exemplar Design Approach versus Reference Design Approach

A variety of different approaches have been adopted in relation to early design work on PPP projects across the UK.

In England, the standard approach was to develop a robust exemplar design. The reasons for developing an exemplar design included:

- it allows the clinical brief and departmental adjacencies to the tested by practical example;
- it allows the Schedule of Accommodation to be tested by practical example;
- it establishes the impact of the development on the site, taking into account key constraint;
- it establishes a more accurate assessment of costs (on a site specific basis);
- it allows meaningful discussion with planners based on likely form of the scheme and allows outline planning to be obtained;
- it conveys the HSE's requirement by example; and
- it establishes the stakeholder environment and assists the stakeholders to become better acquainted with the environment they are likely to encounter during the bid period.

There was always a competing tension in terms of the level of detail to which the exemplar design was developed to – the competing factors including (i) opportunities for innovation for the bidders; (ii) risk transfer; (iii) confusion for stakeholders around basis of design; (iv) cost certainty for the scheme; and (v) cost of developing the exemplar design.

In Scotland, a high level approach was typically adopted and this exemplar design was then used for indicative purposes only – i.e. to inform the bidders of one possible solution which met the requirements of the project. Therefore, bidders were encouraged to develop their own ideas and different alternatives in response to the output specification rather than just adopt the exemplar design.

However, in Northern Ireland, a more detailed approach has always been adopted which the procuring authority then expected the bidders to adopt and further develop – therefore, in this approach the exemplar design was effectively mandatory and to be used as the baseline for further development.

The initial views of the Board are that on this Project, the Reference Design is to have more status than previously adopted in the past in Scotland (and England) and much more in line with the approach adopted in Northern Ireland. The reasons for this include:

- the amount of design work carried out on the project to date is significant which has required a large amount of input from the user groups. This has resulted in a design (internal) which they are satisfied with and feel incorporates their inputs. While some reworking is required in relation to the addition of the Department of Clinical Neurosciences which requires further input from the user groups, this is marginal compared to the levels of input they would need to have if there were to engage in user consultations with three separate bidders all developing a separate design (with a risk that none of these designs are viewed by the user groups to be as effective as the exemplar/reference design);
- further to the above, the Board wish to retain control over certain elements of the design
  which the want to see reflected in the final building design therefore, reflecting these in the
  Reference Design is considered to be an appropriate way to set out these requirements;

 lastly, as a wider issue, this approach should simplify the procurement process which should result in procurement cost and programme savings.

#### 3 Suggested Level of Development

"The Design Development Protocol for PFI schemes" (UK Department of Health publication) has been issued in 2001 and 2004, and was revised as a consultative document in August 2007 to take account of the Competitive Dialogue process. Although it is not yet formally adopted, it is a useful reference document for considering what should be included in the Reference Design which is developed.

From Section 2, five common themes for developing the Reference Design can be summarised as follows:

- to define the clinical functionality of the design (for definition of clinical functionality see Appendix A);
- 2. to develop an accurate assessment of the costings (including high impact abnormals);
- 3. to obtain outline planning permission;
- 4. to define client preferences where appropriate; and
- 5. to provide an examples of a suitable solution to particular element.

In relation to themes 1 and 4, given these are client requirements, the elements of the Reference Design which demonstrate these would be mandatory. In relation to theme 2 (accurate costings), this could be for information only which would then allow the bidders to develop their own proposals and approaches, the result of which could deliver more cost effective solutions. Similarly, in relation to theme 3 (outline planning), these could be for information purposes only to provide the bidders with flexibility as to how to achieve detailed planning permission within the constraints set out in the outline planning permission. Lastly, in relation to theme 5, this would be for information only since illustrating one example of a solution to a particular element.

While making elements of the Reference Design mandatory can impact on the risk transfer achieved, at a high level, this would only really appear relevant to 4 (to the extent these preferences are over and above clinical functionality) since under the standard form Project Agreement the clinical functionality risk sits with the public sector in any event (refer Appendix A). However, this is worth further consideration moving forward.

By considering the factors above in parallel with what is typically provided as part of a Bidders ITSB submission as defined in the "The Design Development Protocol for PFI schemes", a list of the deliverables for the Reference Design can be developed along with an indication of the reason for its inclusion and status (mandatory or for information). This is set out for discussion in Appendix B.

A key factor determining what is to be designated a Mandatory inclusion in the Reference Design is the level to which NHSL wish to pre-determine the outcomes of the bidding process. The Scottish Futures Trust will also have a view on the level to which the proposals should be proscribed to assist in speeding up the bidding process. Comments are included in the table where decisions are required in regard to the level of proscription. Further, the issue of risk transfer will need to be examined

where non-clinical matters are included as Mandatory in the Reference Design to ensure that NHSL does not become liable for risks that should rest with Project Co..

Further consideration is also required regarding the level of detail included in each of the deliverables for the Reference Design. For instances Room Layouts – are these 1:50 plans only or are they also to include discrete equipment lists, elevations and reflected ceiling plans.

Finally the format of the information to be included in the Reference Design needs to be agreed. For instance are \*.dwg CAD format drawings to be issued for the Bidders to use as opposed to \*.pdf's? This would be of considerable assistance to Bidders however some companies are reluctant to release information in this format on the basis that it is uncontrolled.



#### 4 Recommendations

It is recommended that:

- the Board review and comment on the acceptability of the proposals from their perspective;
- a workshop is held between the Board and its advisers to agree the Reference Design deliverables; and
- the agreed Reference Design Deliverables can be shared with BAM to instruct them on the work to be carried out.



#### Appendix A Clinical Functionality

The following is the contractual definition of Clinical Functionality from the Scottish Standard Form Health Project Agreement – this is effectively the element of design risk which is passed back to the procuring authority at Financial Close:

- (a) the following matters as shown on the [1:500 scale development control plan]:
  - (i) the points of access to and within the [development site] and the [buildings];
  - (ii) the relationship between one or more [buildings] that comprise the [development]; and
  - (iii) the adjacencies between different Hospital departments [referenced to a drawing number or numbers];
- (b) the following matters as shown on the [1:200/1:100 scale plans] (referenced to a list of drawing numbers in Project Co's Proposals for example):
  - (i) the points of access to and within the [development site] and the [buildings];
  - (ii) the relationship between one or more [buildings];
  - (iii) the adjacencies between different Hospital departments; and
  - (iv) the adjacencies between rooms within the Hospital departments;
- (c) the quantity, description and areas (in square metres) of those rooms and spaces shown on the [Schedules of Accommodation];
- (d) the location and relationship of equipment, furniture, fittings and user terminals as shown on the [1:50 loaded room plans] in respect of:
  - (i) all bed and trolley positions;
  - (ii) internal room elevations;
  - (iii) actual ceiling layouts; and
  - (iv) [other project specific requirements might need to be considered, for example with regard to theatres and imaging departments]; and
- (e) The location of and the inter-relationships between rooms within a department as shown on scale drawings,

but only insofar as each of the matters listed in (a) to (e) above relation to or affect Clinical Use

### Appendix B Suggested Reference Design Deliverables

Deliverable	Included in Reference Design?	Status	Reason for inclusion	Other Comments
Schedules of Accommodation	Yes / <del>No</del>	Mandatory	Clinical Functionality + Costs	These will be prepared by NHSL with modifications made to reflect the Reference Design. They will indicate the basis upon which the Reference Design had been prepared.
Room Data Sheets	Yes / <del>No</del>	Mandatory	Clinical Functionality + Costs	These will be prepared by NHSL with modifications made to reflect the Reference Design. They will indicate the basis upon which the Reference Design had been prepared.
Equipment Schedules	Yes / <del>No</del>	Mandatory	Clinical Functionality + Costs + Risk	These will be prepared by NHSL with modifications made to reflect the Reference Design. They will indicate the basis upon which the Reference Design had been prepared.
Development Control Plan 1:1000/1:500	Yes / No	Mandatory	Clinical Functionality + Costs + Risks + Planning	This should be prepared by NHSL with modifications made to reflect the Reference Design. It will indicate the basis upon which the Reference Design had been prepared. Site Plan layout will depend on floor plate layout. Compliance will be achieved through Bidders complying with key issues on DCP. The DCP could also be used to indicate the interconnections and links to the existing facilities. This would need to tie in with requirements outlined in the Output Specification in relation to the interface with Consort. The DCP could also include the Urban Design and Landscaping Strategy. External

Deliverable	Included in Reference Design?	Status	Reason for inclusion	Other Comments
				Patient movements should also be indicated.
Departmental Layouts 1:500	Yes / <del>No</del>	Mandatory	Clinical Functionality+ Costs + Risks + Planning	This could be supplemented with Patient Flow Diagrams
General Arrangements Plans 1:200	Yes / <del>No</del>	Mandatory	Clinical Functionality + Costs	
General Arrangement Elevations and Sections.	Yes / <del>No</del>	Non-Mandatory	To indicate NHSL Preference + Costs + Planning	Whether or not the elevations and sections are to be made Mandatory or Non-Mandatory will depend on the extent to which NHSL wish to determine the appearance of the Project. This matter needs to be considered in conjunction with the 'design guidance' the Planning Department issue. This may be sufficient to constrain the Bidders to a solution acceptable to NHSL without the need for elevations and sections as part of the Reference Design.
Generic Room Layouts 1:50	Yes / No	Mandatory	Clinical Functionality	Can only be mandatory in respect to equipment and preferred layout. Final layout will be dependant upon overall building layout.
Key Room Layouts 1:50	Yes / <del>No</del>	Mandatory	Clinical Functionality	Can only be mandatory in respect to equipment and preferred layout. Final layout will be dependant upon overall building layout.
Fire Strategy	Yes / <del>No</del>	Non-Mandatory	To provide exemplar design + Costs + Risks	There will be an overarching requirement for Bidders to comply with all statutory and regulatory requirements. The requirements for the Fire Strategy will be included in the D&C Output Spec. Whilst compliance with the Fire Strategy applied in the Reference Design may be Non-Mandatory, the

Deliverable	Included in Reference Design?	Status	Reason for inclusion	Other Comments
				requirement for Bidders to comply with all statutory and regulatory requirements will be Mandatory.
Interior Design Concepts	Yes? / <del>No</del>	Non-Mandatory	To indicate NHSL preference + Cost	This could be outlined in the D&C Output Spec without inclusion in the Reference Design.
Wayfinding Strategy	Yes? / <del>No</del>	Non-Mandatory	To indicate NHSL preference + Costs	This could be outlined in the D&C Output Spec without inclusion in the Reference Design.
Flexibility and expandability	Yes? / No	Non-Mandatory	To indicate NHSL preference + Costs	This could be outlined in the D&C Output Spec without inclusion in the Reference Design.
Supplies, Storage, Distribution and Waste Management (Soft FM)	Yes / <del>No</del>	Mandatory	Clinical Functionality + Costs	Bidders will have to comply with the Board's prescribed Soft FM strategy. This will also need to be outlined in the D&C Output Spec.
Decontamination	<del>Yes</del> / No			Requirements to be outlined in D&C Output Spec

Deliverable	Included in Reference Design?	Status	Reason for inclusion	Other Comments
and Control of Infection (HAI- SCRIBE)				
BREEAM	Yes / <del>No</del> ?	N/A	To provide exemplar design + Costs	Requirements to be outlined in D&C Output Spec. There may however be a requirement to make an initial assessment of the BREEAM rating for the Reference Design to inform the Estimated Capex.
Geotechnical Site Investigation	Yes / <del>No</del> ?	N/A	To provide exemplar design + Costs	Requirements to be outlined in D&C Output Spec. Should not be included in Reference Design since Bidders to take Ground Conditions risk?
Decanting, Phasing,	Yes / <del>No</del>	Mandatory	Clinical Functionality + Costs	To demonstrate NHSL's requirements in regard to an occupation strategy.
Traffic Impact Assessment and Traffic Management Plan	Yes / <del>No</del>	Mandatory	Clinical Functionality + Costs + Planning	To demonstrate NHSL's requirements in regard traffic management and parking.
Security Strategy	Yes / <del>No</del>	Mandatory	Operational Requirements + Cost	To be supplemented with requirements outlined in Output Spec.
Construction Strategy	<del>Yes</del> / No			Any restrictions / controls required to be outlined in D&C Output Spec. Should not be included in Reference Design since Bidders to take

Deliverable	Included in Reference Design?	Status	Reason for inclusion	Other Comments
				construction requirements risk?
Arch + Civ/Struct Specifications	Yes/No?	?	To indicate NHSL preference + Costs (if included)	This is entirely dependant upon the level of prescription NHSL wish to impose upon the bidders. Normally guidance would be included in the Output Spec with the Bidders taking the whole risk for specification. However an outline specification of key elements could be included in the Reference Design.
Services Infrastructure Plans 1:1000/1:500	Yes / <del>No</del>	Mandatory	To provide exemplar design + Costs	To be supplemented with requirements outlined in Output Spec. To tie in with the requirements outlined in DCP.
Integration of new and existing services.	Yes / <del>No</del>	Mandatory	To provide exemplar design + Costs	To be supplemented with requirements outlined in Output Spec. To tie in with the requirements outlined in DCP.
M&E Strategy drawings and statements	Yes/No?	?	To indicate NHSL preference + Costs (if included)	This is entirely dependant upon the level of prescription NHSL wish to impose upon the bidders. Normally guidance would be included in the Output Spec with the Bidders taking the whole risk for specification. However outline strategies for key services could be included in the Reference Design particularly for the purposes of costings.
Plant Room layouts.	Yes/No?	?	To indicate NHSL preference +	This is entirely dependant upon the level of prescription NHSL wish to impose upon the bidders. Normally guidance would be included in the Output Spec with the Bidders taking the whole risk for specification. However

Deliverable	Included in Reference Design?	Status	Reason for inclusion	Other Comments
			Costs (if included)	outline layouts could be included in the Reference Design particularly for the purposes of costings.
Fire Strategy Drawings 1:200	Yes?/ <del>No</del>	Non-Mandatory	To indicate NHSL preference + Costs	This could be outlined in the D&C Output Spec without inclusion in the Reference Design. To be read in conjunction with statement on Fire Strategy above.
Energy Strategy + Schedules of Power, Heating and Cooling Loads.	Yes / <del>No</del>	Non-Mandatory	To provide exemplar design + Costs	There will be an overarching requirement for Bidders to comply with all statutory and regulatory requirements and requirements outlined in the D&C Output Spec. The information required for the Reference Design is to assist in demonstrating that it complies with NHSL's requirements.
Engineering Design Philosophy	Yes / <del>No</del>	Non-Mandatory	To provide exemplar design + Costs	As above.
Lift Usage Traffic Assessments	<del>Yes</del> / No			This can be covered in the D&C Output Spec.
Life expectancies.	<del>Yes</del> / No			This is normally covered in the D&C Output Spec.
M&E Eng Specifications	Yes/No?	?	To indicate NHSL preference +	This is entirely dependant upon the level of prescription NHSL wish to impose upon the bidders. Normally guidance would be included in the Output Spec with the Bidders taking the whole risk for specification. However an

Lothian Health Board

Deliverable	Included in Reference Design?	Status	Reason for inclusion	Other Comments
			Costs (if included)	outline specification of key elements could be included in the Reference Design and used for the preparation of costings.
Commissioning and Testing	<del>Yes</del> / No			This is normally covered in the D&C Output Spec.
Lighting aesthetics.	<del>Yes</del> / No			This is normally covered in the D&C Output Spec.
ICT strategy	<del>Yes</del> / No			This is normally covered in the D&C Output Spec.



MJB/LOT/7/57

#### CONTRACT

between

#### **LOTHIAN HEALTH BOARD**

and

#### MOTT MACDONALD LIMITED

relative to the provision of project management / technical advisory and design team services for the proposed NPD project for the Royal Hospital for Sick Children / Department of Clinical Neurosciences at the Royal Infirmary of Edinburgh

mac ROBERTS

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## STANDARD MODEL CONTRACT 1 RELATING TO PROFESSIONAL SERVICES

#### **SPECIAL TERMS**

1 Limitation of SERVICE PROVIDER's Liability

#### **CONTRACT SCHEDULES**

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2-4	Key Posts and Contact details
2-5	Sub Contractors
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2-7	SERVICE PROVIDER'S Certificate of Employer's and Public Liability Insurance
2-8	SERVICE PROVIDER'S Certificate of Professional Indemnity Insurance
2-9	CLIENT'S Property
2-10	Dispute Resolution

#### THIS CONTRACT is made

#### BETWEEN

- (1) LOTHIAN HEALTH BOARD, also known as NHS Lothian, having its principal address at Waverley Gate, 2-4 Waterloo Place, Edinburgh EH1 3EG (the "CLIENT"); and
- (2) MOTT MacDONALD LIMITED, a company incorporated under the Companies Acts (Company Number 01243967) whose registered address is at Mott MacDonald House, 8-10 Sydenham Road, Croydon, Surrey CR0 2EE (the "SERVICE PROVIDER").

#### **BACKGROUND**

- (A) The Lords Commissioners of Her Majesty's Treasury as represented by OGCbuying.solutions being a separate Trading Fund of Her Majesty's Treasury without separate legal personality ("the Authority") selected service providers including the SERVICE PROVIDER, to provide Project Management and Design Team Services:
- (B) The SERVICE PROVIDER undertook to provide the same on the terms set out in a framework agreement number RM457/I signed on 20 October and 2<sup>nd</sup> November 2009 (the Framework Agreement);
- (C) The Authority established a set of framework agreements, including the Framework Agreement, in consultation with and for the benefit of public sector bodies. The Authority has overall responsibility for management of those framework agreements;
- (D) The Authority and the SERVICE PROVIDER agree that public sector bodies within the UK may enter into Contracts under the Framework Agreement;
- (E) The CLIENT is granted rights by the Authority in accordance with the Contracts (Rights of Third Parties) Act 1999 to enter into a Contract under the Framework Agreement pursuant to an Order served by the CLIENT on the SERVICE PROVIDER;
- (F) The CLIENT served an Order for services on the SERVICE PROVIDER on 22nd March 2011, a copy of which is annexed hereto; and
- (G) The SERVICE PROVIDER confirmed its agreement to the terms of the Order and its acceptance of the Order and hereby duly executes this Contract.

#### IT IS AGREED AS FOLLOWS:

#### DEFINITIONS, DOCUMENTS AND REPRESENTATIVES

#### 1. Definitions and Interpretation

- 1.1 As used in this Contract:
- 1.1.1. the terms and expressions set out in Schedule 2-1 shall have the meanings set out therein;
- 1.1.2. the masculine includes the feminine and the neuter;
- 1.1.3. the singular includes the plural and vice versa; and
- 1.1.4. the words "include", "includes" and "including" are to be construed as if they were immediately followed by the words "without limitation".
- 1.2. A reference to any statute, enactment, order, regulations or other similar instrument shall be construed as a reference to the statute, enactment, order, regulation or

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#### STANDARD MODEL CONTRACT 1

#### RELATING TO PROFESSIONAL SERVICES

instrument as amended by any subsequent statute, enactment, order, regulation or instrument or as contained in any subsequent re-enactment thereof.

- 1.3. A reference to any document other than as specified in Clause 1.2 shall be construed as a reference to the document as at the date of execution of this Contract.
- 1.4. Headings are included in this Contract for ease of reference only and shall not affect the interpretation or construction of this Contract.
- 1.5. References to "Clauses" and "Schedules" are, unless otherwise provided, references to the Clauses of and Schedules to this Contract.
- 1.6. Terms or expressions contained in this Contract which are capitalised but which do not have an interpretation in Schedule 2-1 shall be interpreted in accordance with the common interpretation within the market for project management and design team services where appropriate. Otherwise they shall be interpreted in accordance with the dictionary meaning.
- 1.7 To the extent that this Contract is expressed to confer rights or benefits on a party who is not a party to this Contract, that party shall subject to and by virtue of the Scots law doctrine of jus quaesitum tertio be entitled to enforce those rights as if it was a party to this Contract. For the avoidance of doubt the consent of any person other than the CLIENT (or the SERVICE PROVIDER, as the case may be) is not required to vary or terminate this Contract.
- 1.8 Except as provided in Clause 1.7 a person who is not a party to this Contract shall have no rights by virtue of the Scots law doctrine of jus quaesitum tertio to enforce any term of this Contract. This Clause 1.8 does not affect any right or remedy of any person that exists or is available otherwise than pursuant to that doctrine.
- 1.9 This Contract shall be governed by and construed in accordance with the law of Scotland.
- 1.10 Where under this Contract an act is required to be done within a specified period of days after or from a specified date, the period shall begin immediately after that date. Where the period would include a day which is a Public Holiday that day shall be excluded.

#### 2. Inconsistency and Entire Agreement

- 2.1 The documents forming this Contract shall be read and taken together. However, in the event and to the extent only of any conflict or inconsistency in the provisions of the Clauses of this Contract and the provisions of the Schedules, the following order of precedence shall prevail:
- 2.1.1 the Special Terms
- 2.1.2 the Conditions of Contract and Schedule 2-1 and the details set out in the Order
- 2.1.3 Schedule 2-2 (CLIENT'S Requirements)
- 2.1.4 Schedule 2-3 (The Ordered Services and Fee Schedule)
- 2.1.5 other Schedules
- 2.2 This Contract constitutes the entire agreement and understanding between the parties in relation to the Contract and supersedes all prior representations, arrangements, understandings, agreements, statements, representations or warranties (whether written or oral) relating to the Ordered Services.
- 2.3 Each party irrevocably and unconditionally waives any rights it may have to claim damages and/or to rescind the Contract for any misrepresentation or for breach of

# STANDARD MODEL CONTRACT 1 RELATING TO PROFESSIONAL SERVICES

any warranty not contained in the Contract unless such misrepresentation or warranty was made fraudulently.

#### 3. Responsibility for documents

- 3.1 The SERVICE PROVIDER shall ensure that all documents which are prepared and submitted by the SERVICE PROVIDER, its Sub-Contractors, staff and agents including any feasibility study, design or reports, drawings and any other documents supplied in connection therewith but excluding drafts of such documents, shall have been prepared to the Contract Standard. It is hereby acknowledged and agreed that the CLIENT shall be entitled to rely on all documents submitted by the SERVICE PROVIDER, its Sub-Contractors, staff and agents for the use of such documents in connection with the Project to which they relate.
- 3.2 The CLIENT may examine and/or comment on schedules, calculations, surveys, reports, specifications, drawings or other documents and/or information which are in the possession of the SERVICE PROVIDER and which concern this Contract at any time, but any such examination or comment (or the absence of any such examination or comment) by the CLIENT will not relieve the SERVICE PROVIDER of any responsibility for the Ordered Services to be provided under this Contract. If the SERVICE PROVIDER finds any ambiguity in or conflict between any document forming part of this Contract, or in any drawings, information or documents issued by the CLIENT in connection with this Contract, then the SERVICE PROVIDER shall notify the CLIENT forthwith, who shall issue such instructions as the CLIENT considers appropriate.

#### 4. CLIENT'S Representative

The CLIENT'S Representative shall act on behalf of the CLIENT in issuing instructions to the SERVICE PROVIDER and for receiving reports, requests or statements or in dealing with any other matter concerning the Contract.

#### 5. Persons dealing with this Contract

The SERVICE PROVIDER shall appoint a partner or director of the SERVICE PROVIDER, firm or company, who shall be the Contract Manager and shall be duly authorised to receive instructions and shall be the point of contact between the CLIENT and the SERVICE PROVIDER throughout the course of this Contract and, subject to reasonable notice, will, on behalf of the SERVICE PROVIDER, attend all meetings with the CLIENT regarding matters relevant to this Contract and will approve and sign all reports submitted to the CLIENT by the SERVICE PROVIDER. No change in this named individual shall be made by the SERVICE PROVIDER without receiving the prior written approval of the CLIENT.

#### 6. SERVICE PROVIDER'S staff

- 6.1 The SERVICE PROVIDER shall employ appropriately qualified, competent, suitable and experienced staff for the proper provision of the Ordered Services to the Contract Standard.
- 6.2 The SERVICE PROVIDER shall use reasonable endeavours to maintain continuity of the SERVICE PROVIDER'S staff.

#### STANDARD MODEL CONTRACT 1

#### RELATING TO PROFESSIONAL SERVICES

- 6.3 The names, experience and professional qualifications of those members of the SERVICE PROVIDER'S staff who will be involved in providing the Ordered Services shall be notified to and approved by the CLIENT prior to such persons commencing their duties. Such notification shall indicate the services they are to perform. No change to those members of the SERVICE PROVIDER'S staff shall be made without receiving the prior approval of the CLIENT. The CLIENT may (but not unreasonably or vexatiously) require the SERVICE PROVIDER to cease to use the services of any member of the SERVICE PROVIDER'S staff for the provision of the Ordered Services. Subject to the approval of the CLIENT, the SERVICE PROVIDER shall replace such persons as the need arises and at the SERVICE PROVIDER'S own expense.
- 6.4 Where the SERVICE PROVIDER is responsible for the appointment of site inspection staff, then the SERVICE PROVIDER shall take full responsibility for the supervision of such staff, for the scope of their duties, payment for their services and for the sufficiency of their performance.

#### 7. Environmental Requirements

- 7.1 The SERVICE PROVIDER shall comply in all material respects with all applicable environmental laws and regulations in force from time to time in relation to the Ordered Services. Without prejudice to the generality of the foregoing, the SERVICE PROVIDER shall promptly provide all such information regarding the environmental impact of the Ordered Services as may reasonably be requested by the CLIENT.
- 7.2 The SERVICE PROVIDER shall meet all reasonable requests by the CLIENT for information evidencing compliance with the provision of this Clause 7 by the SERVICE PROVIDER.

#### **GENERAL OBLIGATIONS**

#### Ordered Services

The SERVICE PROVIDER shall perform and carry out the Ordered Services from the Service Commencement Date and shall at all times perform the Ordered Services to the Contract Standard.

#### 9. Professional responsibility

- 9.1 The SERVICE PROVIDER shall perform the Ordered Services to the following standards (the Contract Standard) which means the performance of the Ordered Services:-
- 9.1.1 using all reasonable skill care and diligence as would a competent and appropriately qualified consultant or other appropriate professional carrying out services of a similar specification, nature, scope, size and complexity as the Ordered Services;
- 9.1.2 in accordance with all relevant provisions of the Contract;
- 9.1.3 in accordance with the SERVICE PROVIDER'S Programme, as applicable;
- 9.1.4 in accordance with all Statutory Requirements;
- 9.1.5 Not Used

## STANDARD MODEL CONTRACT 1

#### **RELATING TO PROFESSIONAL SERVICES**

- 9.1.6 in accordance with the reasonable instructions of the CLIENT'S Representative;
- 9.1.7 in accordance with the SERVICE PROVIDER'S Method Statement; and
- 9.1.8 in coordination and liaison with any other contractor or consultant appointed by the CLIENT.

#### **Duty of Care - Design**

- 9.2 In so far as the SERVICE PROVIDER is responsible for design, the SERVICE PROVIDER:
- 9.2.1 warrants and undertakes that it will use all due skill, care and diligence in the design of the Project that would reasonably be expected of a competent professional designer experienced in carrying out design activities of a similar nature, scope and complexity to those comprised in the Project; and
- 9.2.2 shall be responsible for and liable for the design of the Project.
- 9.3 The SERVICE PROVIDER warrants in relation to the performance of the Ordered Services that all materials, goods and substances used or specified in the course of carrying out the Ordered Services shall be suitable for the purposes included or to be reasonably inferred from the Contract and shall be selected in accordance with the publication "Good Practice in the Selection of Construction Materials" (1997: Ove Arup and Partners, or any update current at the time this Contract is entered into).

#### 10. Duration

The Contract shall commence on the Service Commencement Date and shall remain in full force and effect for the Contract Period unless the Contract is terminated sooner in accordance with these Conditions or in accordance with Common Law or statute.

#### Responsibility for work by others

- 11.1 Where the SERVICE PROVIDER is required to incorporate work provided by others, the SERVICE PROVIDER'S responsibility in respect of such work shall be limited to the review thereof to the extent required to ensure the satisfactory performance of the Ordered Services.
- 11.2 Notwithstanding Clause 11.1, if the SERVICE PROVIDER shall find any discrepancy in or divergence between any documents and/or information, which shall include work provided by others, the SERVICE PROVIDER shall immediately give to the CLIENT written notice specifying the discrepancy or divergence.
- 11.3 The SERVICE PROVIDER shall inform the CLIENT'S Representative upon it becoming apparent to him
  - 11.3.1 that there is any inconsistency or incompatibility between any of the CLIENT'S requirements;
  - 11.3.2 if there is any need to vary the CLIENT'S requirements or the Specification;

the SERVICE PROVIDER shall obtain any instruction to so vary in writing from the CLIENT'S Representative.

### 12. Co-ordination of SERVICE PROVIDER'S Ordered Services

- 12.1 The SERVICE PROVIDER shall:
- 12.1.1 take account of the role of any other contractors who may be appointed by the CLIENT; and
- 12.1.2 co-ordinate and integrate the Ordered Services with the services provided by other contractors to the extent necessary to ensure the satisfactory completion of the Ordered Services; and,
- 12.1.3 where Schedule 2-2 specifies that the SERVICE PROVIDER is appointed as Lead Design Consultant, be responsible for the co-ordination and integration of the services being provided by the other contractors; and
- 12.1.4 as necessary, regularly liaise with and consult with all other contractors appointed by the CLIENT; and
- 12.1.5 keep the relevant contractors fully informed of all matters related to the Ordered Services which are relevant to the services being provided by those relevant contractors.

### 13. SERVICE PROVIDER'S obligation to ensure

- 13.1 Where in this Contract the SERVICE PROVIDER is under an obligation to ensure that events occur which are under the direct control of others and, due to others, the SERVICE PROVIDER is unable to comply with that obligation, then the SERVICE PROVIDER will be liable to the CLIENT only in the event that the SERVICE PROVIDER has failed to use reasonable endeavours to ensure the occurrence of the event.
- 13.2 The SERVICE PROVIDER does not warrant the work of others, save that nothing in this Clause 13 shall affect the SERVICE PROVIDER'S responsibility for Sub-Contractors as stated in Clause 50 (Sub-Contractors). Notwithstanding this, the SERVICE PROVIDER will be required to inform the CLIENT in writing of the action taken to resolve the matter and recommend to the CLIENT a further course of action to ensure the occurrence of the event.

## 14. Compliance with Statutory Requirements

- In providing any Ordered Services or in fulfilling any obligation under the terms of this Contract, the SERVICE PROVIDER shall ensure compliance with all Statutory Requirements including without limitation the Health and Safety at Work Act 1974, the Freedom of Information (Scotland) Act 2002, and the Construction (Design and Management) Regulations 2007 (as applicable). The CLIENT shall pay any statutory charges in respect of necessary applications for planning permission and/or building regulation approval.
- 14.2 The SERVICE PROVIDER shall bear the cost of ensuring that the Ordered Services shall comply with all Statutory Requirements and any amendments thereto except where any such amendment could not reasonably have been foreseen by the SERVICE PROVIDER at the date hereof.

### STANDARD MODEL CONTRACT 1

### RELATING TO PROFESSIONAL SERVICES

14.3 Where such reasonably unforeseeable amendments are necessary, the CLIENT and the SERVICE PROVIDER shall use all reasonable endeavours to agree upon reasonable adjustments to the Fee Schedule as may be necessary to compensate the SERVICE PROVIDER for such additional costs as are both reasonably and necessarily incurred by the SERVICE PROVIDER in accommodating such amendments.

#### 15. Freedom of Information

- 15.1 The SERVICE PROVIDER acknowledges that the CLIENT is subject to the requirements of the Code of Practice on Government Information, FOIA and the Environmental Information Regulations and shall assist and cooperate with the CLIENT to enable the CLIENT to comply with its Information disclosure obligations.
- 15.2 The SERVICE PROVIDER shall, and shall procure that its Sub-Contractors shall:
  - 15.2.1 transfer to the CLIENT all Requests for Information that it receives as soon as practicable and in any event within two (2) Working Days of receiving a Request for Information;
  - 15.2.2 provide the CLIENT with a copy of all Information in its possession, or power in the form that the CLIENT requires within five (5) Working Days (or such other period as the CLIENT may specify) of the CLIENT'S request; and
  - 15.2.3 provide all necessary assistance as reasonably requested by the CLIENT to enable the CLIENT to respond to the Request for Information within the time for compliance set out in the FOIA or the Environmental Information Regulations.
- 15.3 The CLIENT shall be responsible for determining in its absolute discretion whether any Information is exempt from disclosure in accordance with the provisions of the Code of Practice on Government Information, FOIA or the Environmental Information Regulations.
- 15.4 In no event shall the SERVICE PROVIDER respond directly to a Request for Information unless expressly authorised to do so by the CLIENT.
- 15.5 The SERVICE PROVIDER acknowledges that the CLIENT may, acting in accordance with the Scottish Ministers' Code of Practice on the Discharge of Functions by Scottish Public Authorities under the Freedom of Information (Scotland) Act 2002 and the Environmental Information (Scotland) Regulations 2004 December 2010 SG/2010/257, be obliged to disclose Information without consulting or obtaining consent from the SERVICE PROVIDER, or despite having taken the SERVICE PROVIDER'S views into account.
- 15.6 The SERVICE PROVIDER shall ensure that all Information is retained for disclosure and shall permit the CLIENT to inspect such records as requested from time to time.

### 16. Indemnity and Insurance

16.1 The SERVICE PROVIDER shall be responsible for, and shall release and indemnify the CLIENT against all liability for damages, losses, liabilities, claims, actions, costs, expenses (including the cost of legal or professional services, legal costs being on an indemnity basis), proceedings, demands and charges (collectively "Losses") whether arising under statute, contract or at common law arising from:

- 16.1.1 death or personal injury;
- 16.1.2 loss of or damage to the CLIENT's property;
- 16.1.3 third party actions, claims and/or demands brought against the CLIENT or any of its officers, employees, agents or contractors;

in each case which may arise out of, or in consequence of the default, negligence or other tortious or delictual act or omission or breach of contract of the SERVICE PROVIDER or any of its officers, employees, agents or sub-contractors, save to the extent that any such Losses are caused by the negligence or wilful misconduct of the CLIENT or any of its officers, employees, agents or contractors or by the breach by the CLIENT of its obligations under this Contract".

- 16.2 The SERVICE PROVIDER shall by such existing or new policies as he sees fit effect and maintain from the time he commences work on any Site or any part of a Site or from the time he commences the Ordered Services (if earlier) to the expiration of the term, employer's liability insurance in respect of persons in his employment, appropriate to the nature of the Ordered Services. Such insurance shall comply with the Employer's Liability (Compulsory Insurance) Act 1969 (or, if the Ordered Services are performed in Northern Ireland) Order 1972 and any subordinate legislation made thereunder, and shall be for the minimum amount of £10,000,000 (or such other minimum amount as may be stated in the Order) for any one occurrence or series of occurrences arising out of one event.
- The Service Provide shall by such existing or new policies as he sees fit effect and maintain for the same period public liability insurance against legal liability for death or personal injury to any persons and loss or damage to property arising from or in connection with the Ordered Services, which is not covered by employer's liability insurance referred to in Clause 16(2), for the minimum amount stated in the Order, such public liability insurance to include a provision for indemnity to the CLIENT in respect of the SERVICE PROVIDER'S liability under Clause 16(1) provided that the insurance which the SERVICE PROVIDER is required to effect and maintain under this paragraph need not cover loss or damage caused by any Accepted Risk.
- The CLIENT shall have the right to receive, on request, a copy of insurances required to be effected or maintained by the SERVICE PROVIDER under this Clause. The SERVICE PROVIDER shall within 21 Days of the Service Commencement Date, and also within 21 Days of any subsequent renewal or expiry date of relevant insurances, send to the CLIENT a certificate from his insurer or broker attesting that insurance has been effected in accordance with the Contract.
- All insurances required to be effected or maintained by the insuring party under this Clause shall be with reputable insurers, to whom the other party has no reasonable objection, lawfully carrying on such insurance business in the United Kingdom, and upon customary and usual terms prevailing for the time being in the insurance market. The said terms and conditions shall not include any term or condition to the effect that any insured must discharge any liability before being entitled to recover from the insurers, or any other term or condition which might adversely affect the rights of any person to recover from the insurers pursuant to the Third Parties (Rights Against Insurers) Act (Northern Ireland) 1930 as amended by the Insolvency (Northern Ireland) Order 1989 and/or pursuant to the Third Parties (Rights Against Insurers) Act 2010.
- All insurances required to be effected or maintained under Clause 16.3 shall be in the joint names of the CLIENT, and such other person as the CLIENT may reasonably require (including, without limitation, the CLIENT'S Consultants), the SERVICE PROVIDER and all Sub-Contractors provided that, where the terms of the relevant insurance policy are such that the SERVICE PROVIDER is unable to effect insurance

### STANDARD MODEL CONTRACT 1

## RELATING TO PROFESSIONAL SERVICES

- jointly, the SERVICE PROVIDER shall ensure that the policy includes an "Indemnity to Principal" provision in standard insurance industry terms.
- 16.7 If, without the approval of the CLIENT, the SERVICE PROVIDER fails to effect and maintain insurance he is required to effect and maintain under this Clause as described, or obtains a different policy of insurance, or fails to provide a copy of insurances or certificates in accordance with this Clause the CLIENT may, but is not required to, effect and maintain appropriate insurance cover and deduct the cost of doing so from any payment due to the SERVICE PROVIDER under the Contract, or recover such sum from the SERVICE PROVIDER as a debt.
- 16.8 For the avoidance of doubt, it is agreed that nothing in this Clause shall relieve the SERVICE PROVIDER from any of his obligations and liabilities under the Contract.

### **Professional Indemnity Insurance**

- 16.9 Unless stated in the Order or agreed otherwise, the SERVICE PROVIDER shall maintain professional indemnity insurance upon customary and usual terms and conditions prevailing for the time being in the insurance market, and with reputable insurers lawfully carrying on such insurance business in the United Kingdom (on the basis and in an amount not less than that required by the Order), provided always, that such insurance is available at commercially reasonable rates. The said terms and conditions shall not include any term or condition to the effect that the SERVICE PROVIDER must discharge any liability before being entitled to recover from the insurers, or any other term or condition which might adversely affect the rights of any person to recover from the insurers pursuant to the Third Parties (Rights Against Insurers) Act 1930 or the Third Parties (Rights Against Insurers) Act (Northern Ireland) 1930 as amended by the Insolvency (Northern Ireland) Order 1989 and/or pursuant to the Third Parties (Rights Against Insurers) Act 2010. The SERVICE PROVIDER shall not, without the prior approval in writing of the CLIENT, settle or compromise with the insurers any claim which the SERVICE PROVIDER may have against the insurers and which relates to a claim by the CLIENT against the SERVICE PROVIDER, or by any act or omission lose or prejudice the SERVICE PROVIDER'S right to make or proceed with such a claim against the insurers.
- 16.10 The SERVICE PROVIDER shall immediately inform the CLIENT if such insurance ceases to be available at rates that the SERVICE PROVIDER considers to be commercially reasonable. Any increased or additional premium required by insurers by reason of the SERVICE PROVIDER'S own claims record or other acts, omissions, matters or things particular to the SERVICE PROVIDER'S shall be deemed to be within commercially reasonable rates.
- 16.11 The SERVICE PROVIDER shall fully co-operate with any measures reasonably required by the CLIENT including (without limitation) completing any proposals for insurance and associated documents, maintaining such insurance at rates above commercially reasonable rates if the CLIENT undertakes in writing to reimburse the SERVICE PROVIDER in respect of the net cost of such insurance to the SERVICE PROVIDER above commercially reasonable rates or, if the CLIENT effects such insurance at rates at or above commercially reasonable rates, reimbursing the CLIENT in respect of what the net cost of such insurance to the CLIENT would have been at commercially reasonable rates.
- 16.12 As and when reasonably required to do so by the CLIENT, the SERVICE PROVIDER shall produce for inspection documentary evidence in the form of a broker's certificate confirming that his professional indemnity insurance is being maintained.
- 16.13 The above obligation in respect of professional indemnity insurance shall continue notwithstanding determination of the SERVICE PROVIDER's employment under the Contract for any reason whatsoever, including (without limitation) breach by the CLIENT.

## 17. Access to property

- 17.1 If, in the course of undertaking the Ordered Services, the SERVICE PROVIDER is required to enter any establishment, the SERVICE PROVIDER shall comply with the requirements of the CLIENT, and the occupier's rules and regulations regarding admission and shall only visit the establishment at times suitable to the CLIENT or the occupier.
- 17.2 The SERVICE PROVIDER shall comply with any changes to those requirements, rules or regulations, notified to him as a CLIENT'S instruction for a change in the Ordered Services of the SERVICE PROVIDER in accordance with Clause 43 (Payment for changed Ordered Services and variations) during the provision of the Ordered Services.
- 17.3 The names and addresses of all the SERVICE PROVIDER'S or Sub-Contractors' staff to be employed in connection with this Contract and requiring access to property shall be submitted to the CLIENT or the occupier concerned to enable the necessary clearances to be obtained.

### 18. Equal Opportunities & Race Relations

The SERVICE PROVIDER shall comply with all applicable Equalities Legislation in its performance of the Contract and shall take all reasonable steps to ensure that all servants, employees, agents and sub-contractors of the SERVICE PROVIDER engaged in the provision of the Ordered Services do not unlawfully discriminate within the meaning and scope of the Equalities Legislation. This Clause 18 shall be without prejudice to the SERVICE PROVIDER'S general obligation to comply with Statutory Requirements.

# 19. Change in SERVICE PROVIDER'S business

The SERVICE PROVIDER shall inform the CLIENT in writing of any contemplated change of legal status or reorganisation or restructuring of the SERVICE PROVIDER'S business or practice not less than one month prior to such event taking place. In the event of such a change, unless the CLIENT otherwise agrees in writing, the SERVICE PROVIDER and its constituent members shall have the same liability as if no such change of legal status or reorganisation or restructuring of the SERVICE PROVIDER'S business or practice had taken place.

# 20. Conflicts of Interest

- 20.1 The SERVICE PROVIDER shall disclose to the CLIENT'S Representative any actual or potential conflict of interest arising from the SERVICE PROVIDER'S provision of the Ordered Services as soon as is reasonably practical after becoming aware that such actual or potential conflict exists.
- 20.2 Should the parties be unable to either remove the conflict of interest and/or to alleviate its effect the CLIENT shall have the right to terminate this Contract in accordance with Clause 46.
- 20.3 The SERVICE PROVIDER shall immediately notify the CLIENT's Representative of any circumstances giving rise to or potentially giving rise to conflicts of interest relating to the SERVICE PROVIDER (including without limitation its reputation and

standing) and/or the CLIENT of which it is aware or anticipates may justify the CLIENT taking action to protect its interests.

# 21. Copyright

- 21.1 The copyright and all other Intellectual Property Rights in all designs, drawings, specifications, photographs, plans, surveys, reports, and all other documents and/or information (Drawings), prepared by or on behalf of the SERVICE PROVIDER in relation to the Contract, and the work executed from them, shall be the property of and vested in the CLIENT, which reserves the right to reproduce such Drawings, or to execute, or to have executed, work or services in accordance therewith as may be required by the CLIENT.
- 21.2 In the event that the SERVICE PROVIDER does not own the copyright or any Intellectual Property Right in any Drawing the SERVICE PROVIDER shall use all reasonable endeavours to procure the right to grant such rights to the CLIENT to use any such copyright or Intellectual Property Rights from any third party owner of the copyright or Intellectual Property Rights. In the event the SERVICE PROVIDER is unable to procure the right to grant to the CLIENT in accordance with the foregoing it shall procure that the third party grants a direct licence to the CLIENT on industry acceptable terms.
- 21.3 The SERVICE PROVIDER waives any moral right to be identified as author of the Drawings in accordance with section 77, Copyright Designs and Patents Acts 1988 and any right not to have the Drawings subjected to derogatory treatment in accordance with section 8 of that Act as against the CLIENT or any licensee or assignee of the CLIENT.
- 21.4 In the event that any act unauthorised by the CLIENT infringes a moral right of the SERVICE PROVIDER in relation to the Drawings the SERVICE PROVIDER hereby undertakes, if the CLIENT so requests, to institute proceedings for infringement of those moral rights and the CLIENT shall bear the cost of such proceedings.
- 21.5 The SERVICE PROVIDER warrants to the CLIENT that he has not granted and shall not (unless authorised by the CLIENT) grant any rights to any third party to use or otherwise exploit the Drawings.
- 21.6 The SERVICE PROVIDER warrants that the use of the Drawings for the purposes of this Contract will not infringe the rights of any third party.
- 21.7 For no additional fee the SERVICE PROVIDER shall supply copies of the Drawings to the CLIENT; and to the CLIENT'S other consultants as necessary to enable them to discharge their respective functions in relation to this Contract or related works.
- 21.8 After the termination or conclusion of the SERVICE PROVIDER'S employment hereunder, the SERVICE PROVIDER shall supply the CLIENT with copies and/or computer discs of such of the Drawings as the CLIENT may from time to time request, and the CLIENT shall pay the SERVICE PROVIDER'S reasonable costs fro producing such copies or discs.
- 21.9 Priced documents may be used by the CLIENT for the purposes of indexing and analysis without prior approval by the SERVICE PROVIDER, and the SERVICE PROVIDER shall ensure that a similar clause is inserted in all documents to be priced by contractors, or other contractors or sub-contractors.

# 22. SERVICE PROVIDER'S records

- 22.1 The SERVICE PROVIDER and any Sub-Contractor shall retain full and proper records of all documents and/or information relating to this Contract including but not limited to any data or notes whether held on paper, electronically or by any other means for a period of 12 (twelve) years (or, if longer, for the period during which the SERVICE PROVIDER is required to maintain insurance pursuant to Clause 16 (Insurance)) following completion of this Contract, and the CLIENT shall at any time have the right to audit any accounts and examine any documents and/or information so retained by the SERVICE PROVIDER.
- 22.2 The SERVICE PROVIDER, and any Sub-Contractor appointed by the SERVICE PROVIDER, shall maintain detailed records of time spent on the Ordered Services performed on a time basis and shall, when requested, make those records available to the CLIENT.

#### SECURITY

### 23. Official secrets and confidentiality

#### Official Secrets

23.1 The SERVICE PROVIDER shall take all reasonable steps to ensure that all persons employed by the SERVICE PROVIDER or Sub-Contractors in connection with the Ordered Services and this Contract are aware of the Official Secrets Act 1989 and, where appropriate, with the provisions of the Atomic Energy Act 1946 and that these Acts apply to them during the execution of this Contract and after the expiry or termination of this Contract.

# Confidentiality

- 23.2 The SERVICE PROVIDER shall ensure that neither he nor his employees without the written consent of the CLIENT'S Representative make use of, for their own purposes, or disclose to any other person, other than in accordance with the provision of the Ordered Services (except as may be required by law), all or any documents or information provided to the SERVICE PROVIDER by the CLIENT or the CLIENT'S Representative pursuant to this Contract, or which shall come into the possession or knowledge of the SERVICE PROVIDER or any of his employees by virtue of this Contract. All of the above information will be confidential to the CLIENT, and the SERVICE PROVIDER and his employees will be bound by this Clause during the period of this Contract and at all times thereafter.
- 23.3 The SERVICE PROVIDER will indemnify and keep indemnified the CLIENT against all actions, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of any breach by the SERVICE PROVIDER of this Clause. Such indemnity will be without prejudice to any other rights the CLIENT may have.
- 23.4 The SERVICE PROVIDER shall maintain as confidential at all times and shall not divulge by any means of communication (whether oral, written, digital or by some other means) all information supplied by the CLIENT or produced for the CLIENT by the SERVICE PROVIDER in accordance with the Contract.
- 23.5 The SERVICE PROVIDER shall not without the consent of the CLIENT publish, discuss or issue alone or in conjunction with any other person any articles, press releases, or other information relating to the provision of the Ordered Services.
- 23.6 The provisions of this Clause shall survive the expiry of this Contract indefinitely.

# 24 Corrupt Gifts and Payment of Commission

#### 24.1 The SERVICE PROVIDER shall not:

- 24.1.1 offer to give or agree to give any person in Her Majesty's Service any gift or consideration of any kind as an inducement or reward for doing, forbearing to do, or for having done or forborne to do any act in relation to the obtaining or execution of this Contract or any other contract for Her Majesty's Service or for showing favour or disfavour to any person in relation to this or any other contract for Her Majesty's Services;
- 24.1.2 enter into this Contract or any other contract with Her Majesty's Service in connection with which commission has been paid or agreed to be paid by him or on his behalf, or to his knowledge, unless before this Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to the CLIENT.
- 24.2 Any breach of Clause 24.1.1 by the SERVICE PROVIDER or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the SERVICE PROVIDER) or the commission of any offence by the SERVICE PROVIDER or by anyone employed by him or acting on his behalf under the Prevention of Corruption Acts 1889 to 1916 and/or the Bribery Act 2010, in relation to this Contract or any other contract with Her Majesty's Service shall entitle the CLIENT to terminate this Contract and recover from the SERVICE PROVIDER the amount of any loss resulting from such termination and/or to recover from the SERVICE PROVIDER the amount or value of any such gift, consideration or commission.
- 24.3 Any dispute, difference or question arising in respect of the interpretation of this Clause 24, the right of the CLIENT to terminate this Contract or the amount or value of any such gift, consideration or commission shall be decided by the CLIENT whose decision shall be final and conclusive enable them to discharge their respective functions in relation to this Contract.

## CONTROLS AND PROGRAMMING

## 25. Budget Requirements

The SERVICE PROVIDER shall have due regard in the performance of the Ordered Services to the CLIENT'S budget requirements for the Project. The SERVICE PROVIDER shall take no action which may result in that limit being exceeded without first obtaining the CLIENT'S written approval for that expenditure. Further if the SERVICE PROVIDER becomes aware of any circumstances which may cause those budget requirements to be exceeded, the SERVICE PROVIDER shall inform the CLIENT without delay.

# 26. Disputes between contractors

If any difference arises between the contractor and any other consultant or contractor of the CLIENT, the SERVICE PROVIDER shall use is best endeavours to achieve a reconciliation. If the reconciliation is not achieved and is not likely to be achieved then before such difference becomes detrimental to the Project the SERVICE PROVIDER shall refer the matter or difference to the CLIENT for instructions.

### Project variations

In the event that there is any proposed variation to the Project the SERVICE PROVIDER shall inform the CLIENT and provide details of the estimated cost and time effect of the proposed variation. No variation shall be introduced without obtaining the prior written consent of the CLIENT unless failure to give immediate authority for the variation could result in danger to life or where substantial additional expenditure could be avoided by taking such immediate action. In those circumstances, the SERVICE PROVIDER shall inform the CLIENT in writing immediately following the issue of the variation together with reasons for such urgency.

### 28. SERVICE PROVIDER not to commit the CLIENT

The SERVICE PROVIDER shall ensure that either in correspondence or by any other means, the SERVICE PROVIDER shall not commit the CLIENT to any cost or to any action whilst dealing with others on behalf of the CLIENT unless the CLIENT'S prior written approval to such commitment has been obtained.

### 29. SERVICE PROVIDER'S Programme

- 29.1 Unless agreed otherwise the SERVICE PROVIDER shall, within 21 (twenty-one) Days of the Service Commencement Date, prepare and submit to the CLIENT for approval a SERVICE PROVIDER'S Programme which shall include -
  - 29.1.1 the order and timing of the operations the SERVICE PROVIDER plans to do in order to provide the Ordered Services in accordance with Clause 10 (Professional responsibility);
  - 29.1.2 the dates when the SERVICE PROVIDER plans to complete work needed to allow the CLIENT and all others involved to do their work; and
  - 29.1.3 the dates when information is required by the SERVICE PROVIDER from the CLIENT and all others involved.
- 29.2 The SERVICE PROVIDER shall ensure that the SERVICE PROVIDER'S Programme is fully coordinated with that of the CLIENT and all others involved.
- 29.3 The CLIENT may, at any time, instruct the SERVICE PROVIDER to change the SERVICE PROVIDER'S Programme for any reason.
- 29.4 Any approval referred to in Clause 29(1) shall not be construed as the CLIENT'S acceptance of the sufficiency or adequacy of the SERVICE PROVIDER'S Programme.
- 29.5 The CLIENT reserves the right to change any of the dates in the Programme from time to time by providing written notice of such changes to the SERVICE PROVIDER. If the SERVICE PROVIDER objects to any changes it shall promptly notify the CLIENT of its reasonable objections to such changes.
- 29.6 If at any time the SERVICE PROVIDER is delayed or becomes aware of any circumstance which may prevent him from meeting programme requirements he shall forthwith inform the CLIENT and propose any measures which may be practicable to recover the delay or to avoid or reduce the anticipated delay.

29.7 The SERVICE PROVIDER shall comply at his own cost with all reasonable instructions of the CLIENT given for the purpose of achieving budget or programme requirements or minimising or recovering any cost overrun or delay.

### 30. Presentations

When, in providing the Ordered Services, the SERVICE PROVIDER is required to report to the CLIENT giving recommendations, the SERVICE PROVIDER shall without additional charge and when specifically instructed to do so by the CLIENT, make a formal presentation to the CLIENT of matters relevant to those recommendations.

### 31. Tender Documents and Contracts

- 31.1 The SERVICE PROVIDER shall obtain the prior written instructions of the CLIENT regarding the CLIENT'S procedures for obtaining tenders, the forms of contract to be used or any specification requirements or other matters relevant to the type of work to be dealt with by the SERVICE PROVIDER. The SERVICE PROVIDER shall also have due regard to all Statutory Requirements when conducting a procurement exercise.
- 31.2 In the event that the SERVICE PROVIDER is to produce tender documents it shall prepare all tender documents carefully and professionally, submitting them to the CLIENT and any other advisers of the CLIENT as directed by the CLIENT prior to dispatch.

# NOTICES, INSTRUCTIONS, ADDITIONAL SERVICES AND PAYMENTS

# 32. Notices

- 32.1 All communications between the CLIENT and the SERVICE PROVIDER required by or authorised under the Contract including any instruction, consent, approval or authorisation shall be made in a form that can be read, copied and recorded. Communications shall take effect when received in such a form at the address of the recipient stated in Schedule 2-4, or an address subsequently notified to the other party. Communications that are not made in such a form shall be of no effect unless and until confirmed by the sender or recipient in a form that can be read, copied and recorded. All notices shall be in writing and shall be deemed duly given or made:
  - 32.1.1 2 (two) working days after being sent by prepaid special delivery post or;
  - 32.1.2 when delivered by hand, and a signature acknowledging its receipt has been obtained or;
  - 32.1.3 when received in the case of a facsimile provided the relevant answer back is obtained.
- 32.2 In each case the notice must:-
  - 32.2.1 refer to the Contract;
  - 32.2.2 be marked for the attention of the appropriate officer, person or department as notified to the other party in writing.

- 32.3 The notices shall be sent to the addresses of each party to the Contract specified at the beginning of the Contract or to such addresses as each party shall notify the other in writing within 5 (five) working days of any change in its address for service.
- 32.4 Any notice served on a non Working Day or after Working Hours shall be deemed to be served on the following Working Day.
- 32.5 For the avoidance of doubt, electronic mail shall constitute a valid form of communication for the purpose of the Contract except in relation to any notice of termination (which should be sent by prepaid special delivery post or delivered by hand in accordance with Clauses 32.1.1 and/or 32.1.2).

### 33. CLIENT'S instructions

The SERVICE PROVIDER shall comply with all instructions issued by the CLIENT in connection with this Contract, including the modification of, or alteration to, the Ordered Services or alteration to the scope or content of the Project. All instructions shall be in writing, except where the CLIENT considers that there is an emergency, in which case instructions may be given verbally. Verbal instructions shall be immediately effective in accordance with their terms, but shall be confirmed in writing by the CLIENT to the SERVICE PROVIDER within 4 (four) Working Days.

# 34. Change to Ordered Services

The CLIENT may, at any time, instruct a change in the Ordered Services. Where the CLIENT requires a change in the Ordered Services, the SERVICE PROVIDER shall provide the CLIENT with an estimate of the additional or reduced fees which shall be calculated in accordance with Clause 43 (Payment for changed Ordered Services and variations).

# 35. Fees

- 35.1 Unless otherwise set out in the Order the SERVICE PROVIDER shall be entitled to submit invoices each month in respect of Ordered Services properly performed during the preceding month. The SERVICE PROVIDER shall ensure:
  - 35.1.1 the fee reflects the Ordered Services properly performed in the preceding month; and
  - 35.1.2 the fee is calculated in accordance with the fees and/or percentage quoted against each stage, or proportion thereof as relevant, by the SERVICE PROVIDER in the Fee Schedule; and
  - 35.1.3 the invoice includes evidence of the relationship to the stage payments included in the Fee Schedule;
  - 35.1.4 the invoices states whether the invoice is interim or final in relation to that stage; and
  - 35.1.5 the invoice is accompanied by an updated Fee Schedule.
- 35.2 Prior to the submission of the SERVICE PROVIDER'S first invoice, the SERVICE PROVIDER shall submit to the CLIENT an estimate of the amount of fees likely to be claimed on a month by month basis covering the whole of the Ordered Services to be performed under this Contract up to a stated estimated completion date for the Ordered Services. Subsequently, an updated estimate shall accompany each further invoice submitted in accordance with Clause 35.1, irrespective of the basis of the fee.

The SERVICE PROVIDER shall also submit such further information which the CLIENT may reasonably require in order to substantiate the amount claimed.

# 36. Payment

- 36.1 The CLIENT shall pay the SERVICE PROVIDER for Ordered Services satisfactorily performed, such sum or sums to be calculated in accordance with this Contract.
- 36.2 Fee invoices shall be submitted in accordance with Clause 36 (1) above and the fee shall become due and final 30 days after receipt of a valid invoice by the CLIENT.
- 36.3 Not later than five days after the date on which a payment becomes due, or would have become due if the SERVICE PROVIDER had carried out his obligations under the contract, and no set-off or abatement was permitted by reference to any sum claimed to be due under one or more other contracts, the CLIENT shall give notice specifying the amount (if any) of the payment made or proposed to be made, and the basis on which that amount was calculated.
- 36.4 If the amount of any fees or disbursements becoming due hereunder is wrongfully withheld after the relevant final date for payment, such amount shall bear simple interest at the rate of 2% over Bank of England base rate for the time being, from the final date for payment to and including the date on which such amount is paid or discharged. The parties agree that this clause constitutes a substantial remedy for the purposes of the Late Payments of Commercial Debts Act 1998.

### 37. Notice of Intention to withhold

Not later than the date on which payment becomes due the CLIENT may give written notice to the SERVICE PROVIDER which shall specify any amount proposed to be withheld and/or deducted from the invoice, the ground or grounds for such withholding and/or deduction and the amount of the withholding and/or deduction attributable to each ground.

### 38. Right to suspend for non-payment

- 38.1 Without prejudice to any other right or remedy of the SERVICE PROVIDER, where a sum due under the Contract is not paid in full by the final date for payment as required by this Contract, and no effective notice to withhold payment has been given under Clause 37 (Withholding payment), and such failure continues for 7 days after the SERVICE PROVIDER has given to the CLIENT written notice of its intensions to suspend the performance of his obligations under the Contract and the ground or grounds on which it is intended to suspend performance, the SERVICE PROVIDER may then suspend such performance until payment in full occurs.
- 38.2 Any period during which performance is suspended in pursuance of the right conferred by this Clause shall be disregarded in computing, for the purposes of any contractual time limit, the time taken by the party exercising the right or by a third party to complete any work directly or indirectly affected by the exercise of the right. Where the contractual time limit is set by reference to a date rather than a period, the date shall be adjusted accordingly.

## 39. Payment following termination and consequences of termination

- 39.1 In the event of the SERVICE PROVIDER'S employment being terminated in accordance with Clause 45 or in the event of the Contract being terminated in accordance with Clause 46, the SERVICE PROVIDER shall only be entitled to fair and reasonable fees for partial Ordered Services satisfactorily performed together with any fair and reasonable expenses incurred in the provision of the Ordered Services; save that
  - 39.1.1 the total amount payable to the SERVICE PROVIDER under the terms of this Clause shall in no event exceed the amount which would have been payable to the SERVICE PROVIDER had he completed either the whole or, if applicable, a part of the SERVICE PROVIDER'S Ordered Services under the terms of this Contract; and
  - 39.1.2 no expenses shall be reimbursed where the termination occurred as a consequence of any breach by the SERVICE PROVIDER of the Contract, or the grounds set out in Clause 46.2.1 46.2.5.

For the avoidance of doubt, in the event of termination under Clause 45 or Clause 46, the SERVICE PROVIDER shall have no entitlement to be paid or make any claim in respect of any loss of profit, loss of revenue or loss of contracts or otherwise.

- 39.2 Following termination of the Ordered Services in accordance with this Contract, the SERVICE PROVIDER shall deliver to the CLIENT all correspondence, reports, drawings, documents or other records used by the SERVICE PROVIDER in connection with the Ordered Services and the CLIENT may make full use of such correspondence, reports, drawings, documents or other records without further obligation to the SERVICE PROVIDER and in accordance with Clause 21 (Copyright).
- 39.3 In the event of the Contract being determined as a consequence of any breach by the SERVICE PROVIDER of the Contract, or upon the grounds set out in Clauses 46.2.1 46.2.5, then the CLIENT will be entitled to engage another contractor to complete those Ordered Services which otherwise would have been performed by the SERVICE PROVIDER under the terms of this Contract and to recover from the SERVICE PROVIDER any losses or additional costs and expenses which are attributable to such determination and/or the engagement of another contractor. In the event of determination of the Contract for any reason, the SERVICE PROVIDER shall co-operate in the transfer of the Ordered Services in accordance with the CLIENT'S instructions.

# 40. Recovery of sums due

- 40.1 The CLIENT shall be permitted to deduct and withhold from any sum due to the SERVICE PROVIDER under this Contract any sum of money due from the SERVICE PROVIDER under either:
- 40.1.1 this contract; or
- 40.1.2 any other agreement between the SERVICE PROVIDER and the CLIENT;
- 40.1.3 any other agreement between the SERVICE PROVIDER and OGCbuying.solutions; or
- 40.1.4 any other department, office or agency of the Crown,

provided that the terms of such other agreement provide for sums of money due from the SERVICE PROVIDER under that agreement to be recovered by way of a deduction from sums of money due to the SERVICE PROVIDER under this Contract (albeit that this Contract may not be referenced specifically under that agreement).

# 41. Payment of Sub-Contractors

Where work in connection with this Contract has been undertaken by the SERVICE PROVIDER'S Sub-Contractors, then the SERVICE PROVIDER shall pay the Sub-Contractors for those Ordered Services satisfactorily performed within 30 (thirty) Days of the SERVICE PROVIDER'S receipt of a valid invoice for those Ordered Services.

### 42. VAT

- 42.1 All sums payable by or to the CLIENT or the SERVICE PROVIDER are exclusive of Value Added Tax ("VAT"). Where VAT is chargeable on such sums, the payer shall pay, upon production of a valid VAT invoice by the payee, such VAT in addition to such sums.
- 42.2 The SERVICE PROVIDER shall pay to the CLIENT within 7 days of the same being demanded by the CLIENT any VAT or amount in respect of VAT incurred by the CLIENT but which it is unable to recover from HM Customs & Excise which the CLIENT incurs as a result of the SERVICE PROVIDER'S failure to carry out its obligations under this Contract and the CLIENT employing another person to fulfil the same obligations. Where the CLIENT would have been unable to recover VAT if the SERVICE PROVIDER had fulfilled its obligations under this Contract then this clause shall only apply in respect of such additional amounts of or in respect of VAT which the CLIENT is unable to recover.
- 42.3 Where a party is liable to reimburse or indemnify the other party for costs incurred by that other party, the amount to be paid shall not include any VAT charged on such costs, save where the payee is unable to recover such VAT from HM Customs & Excise as input tax.

### 43. Payment for changed Ordered Services and variations

- 43.1 Where the CLIENT has specifically instructed a change in the Ordered Services of the SERVICE PROVIDER, then the rates and prices included in this Contract may be used for the calculation of fees in respect of those changed services or, alternatively, and at the CLIENT'S sole discretion, a lump sum may be agreed between the CLIENT and the SERVICE PROVIDER. Provided always that where the Variation was as the result of the SERVICE PROVIDER'S default, the SERVICE PROVIDER shall not be entitled to any additional remuneration.
- 43.2 Where the CLIENT gives written authority to introduce variations then, to the extent that the SERVICE PROVIDER can show that the variations have involved additional expense in providing drawings, documents and/or information for which reimbursement would not be received by the payment of other fees paid by the CLIENT, then the reasonable cost of the additional drawings, documents and/or information which the SERVICE PROVIDER is required to provide will be reimbursed to the SERVICE PROVIDER by the CLIENT.
- 43.3 The reimbursement of any fees and/or costs claimed by the SERVICE PROVIDER under the terms of this Clause shall be subject to the SERVICE PROVIDER providing

such substantiation of the SERVICE PROVIDER'S claim as the CLIENT may reasonably require on a full "open book" basis.

### 44. Additional work by Sub-Contractors

Where the CLIENT has authorised additional Ordered Services to be undertaken and either the whole or part of those additional Ordered Services are undertaken by Sub-Contractors appointed by the SERVICE PROVIDER in accordance with Clause 49 (Sub-Contractors) then the reimbursement of the SERVICE PROVIDER will include for the additional work undertaken by Sub-Contractors in the same way as if the whole of the additional Ordered Services had been undertaken by the SERVICE PROVIDER'S own staff.

### PARTICULAR POWERS AND REMEDIES

# 45. Suspension of SERVICE PROVIDER'S Ordered Services

By giving a minimum of seven (7) Days' notice to the SERVICE PROVIDER, the CLIENT may suspend the whole or part of the Ordered Services to be performed under the terms of this Contract. Where the whole of the Ordered Services have been suspended and the SERVICE PROVIDER has not been given instructions to resume the suspended Ordered Services within 6 (six) months from the date of such suspension, then the SERVICE PROVIDER may by notice to the CLIENT request an instruction that the suspended Ordered Services shall be resumed and, if no such instruction is received from the CLIENT within 30 (thirty) Days of such notice, the SERVICE PROVIDER shall have the right to treat the SERVICE PROVIDER'S employment under this Contract as terminated upon the expiry of the 30 (thirty) Days.

### 46. Determination by the CLIENT

### Voluntary Determination by CLIENT.

46.1 The CLIENT shall be entitled at its absolute discretion to terminate the Contract at any time and for any reason by giving fourteen (14) Days' notice in writing to the SERVICE PROVIDER.

# Determination as a result of Termination Events.

46.2 The CLIENT may at any time by notice in writing terminate this Contract as from the date of service of such notice, or a later date specified in such notice, if any of the Termination Events specified below occur. The Termination Events are:

### 46.2.1 if the SERVICE PROVIDER:

46.2.1.1	commits an act of fraud or bankruptcy; or
46.2.1.2	has been convicted of a criminal offence relating to the conduct of its business or profession; or
46.2.1.3	has committed an act of grave misconduct in the course of its business or profession; or
46.2.1.4	has failed to comply with any obligations relating to the payment of any taxes or social security contributions; or
46.2.1.5	has made any serious misrepresentations in the tendering process for any project or matter in which the public sector has or had a significant participation; or

- 46.2.1.6 has failed to obtain any necessary licences or obtain or maintain membership of any relevant body; or
- demerges into two or more firms, merges with another firm, incorporates or otherwise changes its legal form or there is a change of control as defined by section 416 of the Income and Corporation taxes Act 1988 (any such case being a "Change of Control") and, in any such Change of Control, there are reasonable grounds for the CLIENT to withhold its consent relating to the financial standing of the new entity through which it is proposed that the Ordered Services will be delivered or there are security concerns arising from the provision of the Ordered Services by the new entity.; or
- 46.2.2 the CLIENT has reasonable grounds to object to the SERVICE PROVIDER arising from security concerns in respect of the SERVICE PROVIDER; or
- the SERVICE PROVIDER, being an individual, or where the SERVICE 46.2.3 PROVIDER is a firm, any partner or partners in that firm who together are able to exercise direct or indirect control, shall at any time become bankrupt or shall have a receiving order or administration order made against him or shall make any composition or arrangement with or for the benefit of his creditors, or shall make any conveyance or assignment for the benefit of his creditors, or shall purport so to do, or appears unable to pay or to have no reasonable prospect of being able to pay a debt within the meaning of Section 268 of the Insolvency Act 1986, or he shall become apparently insolvent within the meaning of the Bankruptcy (Scotland) Act 1985 as amended by the Bankruptcy (Scotland) Act 1993, or any application shall be made under any bankruptcy or insolvency act for the time being in force for sequestration of his estate, or a trust deed shall be granted by him on behalf of his creditors, or any similar event occurs under the law of any other jurisdiction; or
- the SERVICE PROVIDER, being a company, passes a resolution, or the 46.2.4 Court makes an order that the SERVICE PROVIDER or its Parent Company be wound up otherwise than for the purpose of a bona fide reconstruction or amalgamation, or a receiver, manager or administrator on behalf of a creditor is appointed in respect of the business or any part thereof of the SERVICE PROVIDER or the Parent Company (or an application for the appointment of an administrator is made or notice to appoint an administrator is given in relation to the SERVICE PROVIDER or the Parent Company), or a moratorium comes into force pursuant to Schedule A1 of the Insolvency Act 1986, or circumstances arise which entitle the Court or a creditor to appoint a receiver, manager or administrator or which entitle the Court otherwise than for the purpose of a bona fide reconstruction or amalgamation to make a winding-up order, or the SERVICE PROVIDER or its Parent Company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 (except where the claim is made under Section 123(1)(a) and is for an amount of less than ten thousand pounds (£10,000)) or any similar event occurs under the law of any other jurisdiction; or
- 46.2.5 where the SERVICE PROVIDER is an unincorporated joint venture and any of the events referred to in Clause 46.2.3 or 46.2.4 occur in relation to any member of such unincorporated joint venture who is a signatory to this Framework Agreement.

# STANDARD MODEL CONTRACT 1

### RELATING TO PROFESSIONAL SERVICES

- 46.3 Without prejudice to the provisions of Clause 46.2, the CLIENT may at any time by notice in writing terminate this Contract forthwith if the SERVICE PROVIDER is in material Default of any obligation under this Contract and:
  - 46.3.1 the material Default is capable of remedy and the SERVICE PROVIDER shall have failed to remedy the material Default within thirty (30) Days of written notice to the SERVICE PROVIDER specifying the material Default and requiring its remedy; or
  - 46.3.2 the material Default is not capable of remedy.
- 46.4 The SERVICE PROVIDER shall promptly notify the CLIENT in writing on each occasion of the occurrence of any Change of Control specified in Clause 46.2.1.7. The CLIENT shall only be permitted to exercise its rights pursuant to Clause 46.2.1.7 for six (6) Months after service of a notice by the SERVICE PROVIDER pursuant to this Clause relative to each such Change of Control and shall not be permitted to exercise such rights where the CLIENT has agreed in advance in writing to the particular change and such change takes place as proposed.
- 46.5 For the purposes of Clause 46.2.1.7, the following shall be disregarded:
  - 46.5.1 any change in beneficial or legal ownership of any shares that are listed on a stock exchange resulting in the relevant shareholding being less than or equal to five per cent (5%) of the total issued share capital; and
  - 46.5.2 any transfer of shares or of any interest in shares by a person to its affiliate where such transfer forms part of a bona fide reorganisation or restructuring.

### 47. Dispute Resolution

Any dispute arising in relation to any aspect of this Contract shall be resolved in accordance with the dispute procedure set out in Schedule 2-10.

# ASSIGNMENT, SUB-CONTRACTORS, AND PARENT COMPANY GUARANTEE

### 48. Assignment

- 48.1 The SERVICE PROVIDER shall not, without the consent in writing of the CLIENT, sub-contract, sub-let, assign or transfer the Contract, or any part, share or interest under it. No sum of money to become payable under the Contract shall be payable to any person other than the SERVICE PROVIDER without the CLIENT'S written consent.
- 48.2 Subject to the provisions of Clause 48.5, the CLIENT shall be entitled to:
- 48.2.1 Assign or otherwise dispose of its rights and obligations under this Contract or any part thereof to any Contracting Authority; or
- 48.2.2 Assign or otherwise dispose of its rights and obligations under this Contract to any other body (including any private sector body) which substantially performs any of the functions that previously had been performed by the CLIENT;
  - provided that where such assignment or other disposal increases the burden of the SERVICE PROVIDER'S obligations pursuant to this Contract, the SERVICE PROVIDER shall be entitled to such charges as may be agreed between the CLIENT and the SERVICE PROVIDER to compensate for such additional burdens.
- 48.3 Subject to the provisions of Clause 48.5 the CLIENT shall be entitled, without the need to obtain the SERVICE PROVIDER'S consent to seek to

- 48.3.1 novate this Contract or any part thereof to any Contracting Authority; or
- 48.3.2 novate its rights and obligations under this Contract to any other body (including any private sector body) which substantially performs any of the functions that previously had been performed by the CLIENT;
  - upon such terms as the CLIENT shall propose provided that where such novation increases the burden of the SERVICE PROVIDER'S obligations pursuant to this Contract, the SERVICE PROVIDER shall be entitled to such charges as may be agreed between the CLIENT and the SERVICE PROVIDER to compensate for such additional burdens.
- 48.4 Subject to the provisions of Clause 48.5, any change in the legal status of the CLIENT such that it ceases to be a Contracting Authority shall not affect the validity of this Contract. In such circumstances, this Contract shall bind and inure to the benefit of any successor body to the CLIENT.
- 48.5 If this Contract is novated to a body which is not a Contracting Authority pursuant to Clause 48.3.1 or if a successor body which is not a Contracting Authority becomes the CLIENT pursuant to Clause 48.4 (in the remainder of this Clause 48 both such bodies are referred to as the "transferee"):
- 48.5.1 the transferee shall only be able to assign, novate or otherwise dispose of its rights and obligations under this Contract or any part thereof with the previous consent in writing of the SERVICE PROVIDER; and
- 48.5.2 The following Clauses shall be varied form the date of the novation or the date of the change of status (as appropriate) as set out below as if this Contract had been amended by the CLIENT and the SERVICE PROVIDER in accordance with Clause 34:
  - 48.5.2.1 in Clause 24.1.1, the first reference to "in Her Majesty's Service" shall be replaced with "employed by the CLIENT or acting on its behalf" and the second and third references to "Her Majesty's Service" shall be replaced with "the CLIENT"; and
  - 48.5.2.2 in Clause 24.1.2 the words "with Her Majesty's Service" shall be replaced with "with the CLIENT or any person acting on its behalf"; and
  - 48.5.2.3 in clause 24.2 the words "Her Majesty's Service" shall be replaces with "the CLIENT"; and
  - 48.5.2.4 Clause 40 shall be deleted.

# 49. Approval of Sub-Contractors

- 49.1 The SERVICE PROVIDER may:
- 49.1.1 upon prior written notice to the CLIENT employ any of the Approved Sub-contractors; and/or
- 49.1.2 upon prior written approval of the CLIENT, which approval shall be at the discretion of the CLIENT, employ any contractors who are not Approved Sub-Contractors.

For the purposes of this Contract the Approved Sub-Contractors and the contractors approved in accordance with 49.1.2 shall be termed Sub-Contractors and shall be listed in Schedule 2-5 together with details of the obligations and responsibilities of each Sub Contractor in respect of the provision of the Ordered Services. Other sub contractors shall not be used to fulfil such obligations and responsibilities without the prior written approval of the CLIENT.

49.2 Within 7 (seven) Days of the Service Commencement Date and the CLIENT'S provisional acceptance of the list of proposed Sub-Contractors, the SERVICE PROVIDER must submit for the approval of the CLIENT, a Certificate of Professional Indemnity Insurance (if the relevant Sub-Contractor is required to have Professional Indemnity Insurance) and a Certificate of Employer's and Public Liability Insurance, all duly completed on behalf of each of the proposed Sub-Contractors.

#### 50. Sub-Contractors

The SERVICE PROVIDER shall be fully responsible for the Ordered Services undertaken by Sub-Contractors whom the SERVICE PROVIDER shall himself appoint and the SERVICE PROVIDER shall have the same responsibility for the Ordered Services undertaken by such Sub-Contractors as if such Ordered Services had been undertaken directly by the SERVICE PROVIDER. The SERVICE PROVIDER shall further be responsible for entering into any agreements with Sub-Contractors as considered necessary and any fees or expenses claimable by those Sub-Contractors and any costs incurred by the SERVICE PROVIDER in employing those Sub-Contractors and in accepting the additional responsibilities thereby shall be deemed to be included in the SERVICE PROVIDER'S Proposals.

#### 51. Sub-Contractor warranties

In so far as it is required by the CLIENT it shall be a condition of the CLIENT'S approval of a Sub-Contractor that the SERVICE PROVIDER and the Sub-Contractor shall enter into a direct CLIENT/Sub-Contractor Agreement (Warranty) in the form specified by the CLIENT, or such other form as the CLIENT may agree; and that the ultimate holding company (if any) of the relevant Sub-Contractor shall enter into a guarantee in respect of the Sub-Contractor's obligations pursuant to such CLIENT/Sub-Contractor Agreement, in the form specified by the CLIENT, or such other form as the CLIENT may agree; and that the SERVICE PROVIDER shall deliver to the CLIENT such CLIENT/Sub-Contractor Agreement and guarantee, both duly executed, within 28 (twenty-eight) Days of the CLIENT'S approval of the relevant Sub-Contractor. If that condition is not fulfilled, the CLIENT'S approval of the relevant Sub-Contractor shall be null and void, and the SERVICE PROVIDER shall cease to employ that Sub-Contractor. The CLIENT will not enter into any other direct agreement with a Sub-Contractor.

# 52. Direct appointment of other contractors

- 52.1 Where it is indicated in Schedule 2-2 that the CLIENT intends to appoint other contractors to undertake services, the CLIENT will enter into direct agreements with such contractors and will be responsible for the payment of their fees and, where possible, the names of such contractors will be stated in Schedule 2-2.
- 52.2 Where other contractors are appointed by the CLIENT, the SERVICE PROVIDER shall co-operate fully with those appointed contractors in order to ensure that production of the SERVICE PROVIDER'S drawings, design information or other relevant documents or information are fully co-ordinated with the work of the other contractors and that they meet the required programme. The SERVICE PROVIDER shall attend all meetings which may be called by any appointed contractor in connection with the Ordered Services.

# 53. Specific parent company guarantee

In so far as it is requested by the CLIENT the SERVICE PROVIDER shall, within 21 (twenty-one) Days of the Service Commencement Date, deliver to the CLIENT a specific parent company guarantee in the form set out in Schedule 2-6 from its ultimate holding company (if any).

### **SPECIAL TERMS**

The Contract shall be amended by the following Special Terms agreed by the CLIENT and the SERVICE PROVIDER:

# Limitation of SERVICE PROVIDER's Liability

The maximum aggregate liability of the SERVICE PROVIDER under this Contract in respect of the Ordered Services shall not exceed Ten Million Pounds (£10,000,000) Sterling; provided that the foregoing limitation of liability shall not apply in respect of:

- any costs, expenses, losses or damages which arise out of the death or injury of any person where such death or injury is caused or contributed to by the Default of the SERVICE PROVIDER or any of its Sub-Contractors;
- (b) any liability to any third party for any loss or damage caused by the Default of the SERVICE PROVIDER or any of its Sub-Contractors;
- (c) any liability which is or ought to be covered by the public liability insurance to be effected and maintained by the SERVICE PROVIDER under Clause 16.3; and/or

(d) any costs, expenses, losses or damages which arise out of the fraud or wilful misconduct of the SERVICE PROVIDER or any of its Sub-Contractors.

IN WITNESS WHEREOF these presents consisting of this and the twenty-five preceding pages together with Schedules 2-1 to 2-10 inclusive, the copy of the Order, and the Fee Schedule, are executed as follows:

Subscribed for and on behalf of Lothian Health Board:

Signature of Authorised Signatory	Full name of Authorised Signatory
Date when signed:	10 (10) ii
Place where signed:	RIE.
in the presence of this witness:	Signature of witness
Full name of witness:	
Address of witness:	
Subscribed for and on behalf of Mott  Signature of Director / Company Secretary  Date when signed:	Full name of Director / Gompany Scerctory
Place where signed:	
In the presence of this witness:	Signature of witness
Full name of witness:	
Address of witness:	1160

# **SCHEDULE 2-1**

# INTERPRETATIONS

The expressions set out below shall have the meanings ascribed thereto:

Definition	Meaning			
Accepted risks	Means the risks of:  (a) pressure waves caused by the speed of aircraft or other			
	aerial devices;			
	(b) ionising radiations or contamination by radioactivity from			
	any nuclear fuel or from nuclear waste from the			
	combustion of nuclear fuel;			
	(c) the radioactive, toxic, explosive or other hazardous			
	properties of any explosive nuclear assembly (including			
	any nuclear component); and			
	(d) war, invasion, act of foreign enemy, hostilities (whether			
	or not war has been declared) civil war, rebellion,			
	insurrection, or military or usurped power.			
Approved Sub-	means the sub-contractors listed in Schedule 9 of the Framework			
Contractors	Agreement.			
AUTHORITY	means OGCbuying.solutions			
Catalogue of Services	means the catalogue of services that shall be made available to			
_	the CLIENT by the SERVICE PROVIDER in electronic format			
	The Catalogue of Services specifies the Services available to the			
	CLIENT under this Contract.			
CLIENT Billing Address	means the customer billing address specified in Schedule 2-4			
	of this Contract.			
CLIENT'S Representative	means the person employed in that capacity named in the			
	CLIENT'S Requirements and appointed by the CLIENT to act or			
	his behalf, or such other person as may be appointed in that			
	capacity for the time being by the CLIENT.			
CLIENT'S Requirements	means the CLIENT'S requirements as specified in Schedule 2-2.			
Confidential Information	means any information designated as such by the party			
	disclosing that information.			
Contract	means the binding agreement, comprising the Conditions o			
	Contract and the Schedules, incorporating any applicable			
	Special Terms, between the CLIENT and the SERVICE			
	PROVIDER relating to the provision of the Ordered Services			
	resulting from the placing of an Order by the CLIENT.			
Contract Manager	means the person (together with any duly authorised deputies			
•	appointed by the SERVICE PROVIDER to act as Contract			
	Manager in respect of this Contract or any replacement notified			
	by the SERVICE PROVIDER to the CLIENT.			
Contract Period	means the period as set out in the Order which commences or			
	the Service Commencement Date.			
Contract Standard	means the standard to which the Ordered Services are to be			
	provided as set out in Clause 9.			
Days	means calendar days.			
Default	means any negligent act or omission, any breach of contract			
<del>_</del>	and/or any failure by the SERVICE PROVIDER properly to			
	perform any of the obligations, terms and conditions of the			
	Contract including (without limitation) any failure by the			
	SERVICE PROVIDER to perform the Ordered Services to the			
	Contract Standard.			

Definition	Meaning
Environmental Information Regulations	means the Environmental Information (Scotland) Regulations 2004 and any guidance and/or codes of practice issued by the Scottish Information Commissioner in relation to such regulations.
Equalities Legislation	all Legislation which makes unlawful discrimination on grounds of sex, sexual orientation, gender reassignment, age, disability, colour, race, ethnic, or national origin, religion, marital status, part time or temporary status in employment or otherwise including, without limitation, the Race Relations Act 1976, as amended by the Race Relations (Amendment) Act 2000, the Sex Discrimination Act 1975, the Equal Pay Act 1970, the Disability Discrimination Act 1995, and the Equality Act 2010.
Fee Schedule	means the schedule of rates, charges and/or percentages agreed between the CLIENT and the SERVICE PROVIDER for carrying out the Contract and as set out in Schedule 2-3.
FOIA	means the Freedom of Information (Scotland) Act 2002 and any subordinate legislation made under this Act from time to time together with any guidance and/or codes of practice issued by the Scottish Information Commissioner in relation to such legislation, together with the Scottish Ministers' Code of Practice on the Discharge of Functions by Scottish Public Authorities under the Freedom of Information (Scotland) Act 2002 and the Environmental Information (Scotland) Regulations 2004 December 2010 SG/2010/257.
Framework Agreement	means the framework agreement between the AUTHORITY and the SERVICE PROVIDER under which the AUTHORITY has established a contractual vehicle for the provision of Ordered Services to CLIENTS.
Group	means and includes a company and every holding company of that company for the time being, and every subsidiary for the time being of every such holding company, and the terms "CLIENT'S Group" and "SERVICE PROVIDER'S Group" shall be interpreted accordingly; but, while the CLIENT is a Minister of the Crown, a government department or other Crown agency or authority, the term "CLIENT'S Group" shall also include all other Ministers of the Crown, government departments and Crown agencies and authorities.
Holding Company	shall have the meaning given in Section 1159 of the Companies Act 2006.
Information	has the meaning given under section 73 of the Freedom of Information (Scotland) Act 2000.
Intellectual Property Rights	means any and all patents, trade marks, service marks copyright, moral rights, rights in a design, know-how confidential information and all or any other intellectual or industrial property rights whether or not registered or capable of registration and whether subsisting in the United Kingdom or any other part of the world together with all or any goodwil relating or attached thereto.
Key Personnel	means the key personnel as specified in Schedule 2-4.
Method Statement	means the method statements or statements included in the SERVICE PROVIDER'S Proposals.
Month	means a calendar month.
OGC	means the Office of Government Commerce.
OGCbuying.solutions	means the Lords Commissioners of Her Majesty's Treasury as represented by OGCbuying.solutions being a trading fund of

Definition	Meaning
	Her Majesty's Treasury without separate legal personality.
Order	means an order for Ordered Services served by the CLIENT on the SERVICE PROVIDER.
Ordered Services	means the work performed or to be performed for the CLIENT by the SERVICE PROVIDER as specified in Schedule 2-3.
Parent Company	means any company which is the ultimate Holding Company of the SERVICE PROVIDER or any other company of which the ultimate Holding Company of the SERVICE PROVIDER is also the ultimate Holding Company and which is either responsible directly or indirectly for the business activities of the SERVICE PROVIDER or which is engaged in the same or similar business to the SERVICE PROVIDER.
Project	means the works for which the SERVICE PROVIDER is to provide professional services in accordance with the terms of this Contract.
Quarter	means a three (3) Month period beginning on 1st January, 1st April, 1st July or 1st October.
Requests for Information	means a request for information or an apparent request under the Code of Practice on Access to government Information, FOIA or the Environmental Information Regulations.
Schedule	means a schedule to this Contract.
Service Commencement Date	means the date of the commencement of this Contract as specified in the Order, or such other date as is agreed between the CLIENT and the SERVICE PROVIDER.
SERVICE PROVIDER'S Programme	means the programme to be provided by the SERVICE PROVIDER in accordance with the provisions of Clause 29.
SERVICE PROVIDER'S Proposals	means the proposals made by the SERVICE PROVIDER to the CLIENT in response to the CLIENT'S Requirements.
Special Terms	means any terms which are additional to the Conditions of Contract, which are agreed between the CLIENT and the SERVICE PROVIDER in the Order and included in the Contract.
Staff	Means all persons used by the SERVICE PROVIDER or any sub-contractor to perform the Ordered Services
Statutory Requirements	means all requirements to be complied with under any Act of Parliament; any instrument, rule or order made under any Act of Parliament; or any regulation or byelaw of any local authority; or any regulation, directive or decision of the European Union having the force of law
Sub-Contractor	means any contract or proposed contract between the SERVICE PROVIDER and any third party in respect of the provision of the Ordered Services including any Approved Sub-Contractors. The terms "Sub-Contractor" "Sub-Consultant" and "Sub-Contracting" shall be similarly construed.
Subsidiary	shall have the meaning given in Section 1159 of the Companies Act 2006.
Working Day	means Monday to Friday inclusive, excluding English public and bank holidays.
Year	means a calendar year.

# SCHEDULE 2-2 CLIENT'S REQUIREMENT

# INTRODUCTION

This Schedule 2-2 specifies the CLIENT'S Requirement.

The CLIENT'S Requirement is the tasks listed in the "Description" column of the Fee Schedule.

# SCHEDULE 2-3 THE SERVICES AND THE FEE SCHEDULE

### INTRODUCTION

This Schedule 2-3 specifies the Ordered Services to be provided and the corresponding Fee Schedule.

# THE SERVICES

The Services are the tasks listed in the column titled "Description" in the Fee Schedule. The Services are to be carried out as follows:

Team Organisation Chart:

## Allocation of Responsibilities

The general split of responsibilities between the technical advisory team is summarised in the following matrix:

Element of Service	MM	DL	TG	П
Lead Adviser	√			
Project Management		1		
NPD Procurement Advice	√	<b>√</b>		
Architectural	√			
Technical and Engineering	√			

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Element of Service	MM	DL	TG	TT
Facilities Management	V	V		
Cost Consultancy			V	
CDM Co-ordinator				V

### Key Personnel:

The key personnel for each organisation are:

# **Mott MacDonald Limited:**

Richard Cantlay – Lead NPD Procurement Adviser
Andrew Scott – Lead Technical Adviser / NPD Procurement Adviser
David Stillie – Lead Architectural and Technical Adviser
Andrew Duncan – Technical Co-ordinator
Kenneth Birrell – Lead Facilities Management Adviser

## Davis Langdon LLP:

Ken Fraser – Project Director Kevin Bradley – NPD Procurement Director Fraser Macquarie – Project Manager Richard Park – Deputy Project Manager Naomi Lillie – Project Administrator Simon McLaughlin – Lead FM Adviser

### **Thomson Gray Limited:**

Ron Thomson – Lead Cost Consultant James Gibson – Cost Consultant Ian McLean – Cost Consultant

### **Turner & Townsend:**

Graham Walker

## Detailed Methodology:

A detailed methodology of how the Services will be delivered will be developed after appointment. This will set out in detail the approach that has been assumed in developing the fee for the Services to be delivered and will be used to agree between the SERVICE PROVIDER and the CLIENT the approach to be adopted. The detailed methodology will be based upon the split of responsibilities included in the table above and set out in more detail in the Fee Schedule.

## Programme:

The key milestones are as follows:

Key Stage	Duration	
Appointment of TA team	Month 0	
NPD Financial Close	Month 28	
Construction Complete	Month 64	

#### THE FEE SCHEDULE

Enclosed is the Fee Schedule. The Fee Schedule is divided into the following components:

Section A sets out a fixed fee for delivering the Services which are required from the commencement of the Services up to the point of achieving financial close on the NPD procurement process. This fixed fee is not subject to change for inflation.

Section B sets out a provisional sum for delivering those Services which are required during the construction period which will be reviewed and confirmed with the CLIENT in writing prior to commencing the delivery of such Services. After 1<sup>st</sup> September 2013, this provisional sum is subject to inflation adjustment using an index to be agreed in writing with the CLIENT.

Section C sets out a provisional sum for delivering those Services which are required in relation to the development of the reference design for the Project. This provisional sum is not subject to change for inflation.

Section D sets out a provisional sum for delivering prescribed additional Services with the prior written agreement of the CLIENT. After 1<sup>st</sup> September 2013, this provisional sum is subject to inflation adjustment using an index to be agreed in writing with the CLIENT.

In relation to those parts of the Services which are the subject of provisional sums (as set out above), then unless otherwise agreed in writing by the CLIENT and the SERVICE PROVIDER, the fees for such parts of the Services shall be calculated on the basis of the Blended Daily Rates specified in the Fee Schedule (and not for the avoidance of doubt on the basis of the amount of the provisional sums themselves).

Provided always that in the event that at any time during the Contract Period the SERVICE PROVIDER or any of its Sub-Contractors enters into a framework agreement with the Scottish Futures Trust (or any successor body to the Scottish Futures Trust) or the Scottish Ministers, and the rates under such framework agreement are lower than the fees calculated in accordance with this Schedule 2-3 and/or the Fee Schedule, the fee rates under this Contract in respect of the SERVICE PROVIDER or such Sub-Contractor(s) (as the case may be) shall be reduced to reflect the lower rates under such framework agreement.

# SCHEDULE 2-4 **KEY POSTS AND CONTACT DETAILS**

## 1. INTRODUCTION

This Schedule 2-4 contains details of the key personnel of both parties involved with this Contract and also relevant contact details.

2.	For the	CLIENT	(CLIENT'S	Representa	tive):
----	---------	--------	-----------	------------	--------

For the CLIENT (CLIENT'S Representative):
Name of CLIENT's Representative Brian Currie
Telephone Number:
Fax Number:
Email:
CLIENT'S Billing address:
NHS Lothian Finance Services Accounts Payable Department Pentland House 47 Robbs Loan Edinburgh
EH14 1TY
For the SERVICE PROVIDER (Contract Manager):
Name of Contract ManagerAndrew Oldfield
Telephone Number:
Fax Number:
Email:

3.

# SCHEDULE 2-5 SUB-CONTRACTORS

# INTRODUCTION

This Schedule 2-5 sets out the SERVICE PROVIDER'S principal Sub-Contractors and their obligations and responsibilities arising under this Contract. Other sub-contractors shall not be used to fulfil such obligations and responsibilities.

Name	Obligations and Responsibilities			
Davis Langdon LLP	As set out in the section titled "Allocation of Responsibilities" included within Schedule 2-3.			
Thomson Gray Limited	As set out in the section titled "Allocation of Responsibilities" included within Schedule 2-3.			
Turner & Townsend	CDM Co-ordinator and as set out in the section titled "Allocation of Responsibilities" included within Schedule 2-3.].			

SCHEDULE 2-5 NOT USED

# SCHEDULE 2-6 PARENT COMPANY GUARANTEE

**OGC buying.solutions Framework Agreement No.** RM457/I signed on 20 October and 2nd November 2009:

Ordered Services: Project Management and Design Team Services;

CLIENT'S Reference No: NM66866

THIS AGREEMENT is made

### BETWEEN:

(1) MOTT MacDONALD GROUP LIMITED, a company incorporated under the Companies Acts (Company Number 1110949) whose registered office is at Mott MacDonald House, 8-10 Sydenham Road, Croydon, Surrey CR0 2EE

("the Guarantor"); and

(2) LOTHIAN HEALTH BOARD, also known as NHS Lothian of Waverley Gate, 2-4 Waterloo Place, Edinburgh EH1 3EG

("the CLIENT", which term shall include its successors and assignees).

WHEREAS by an Agreement ("the Contract") entered into on 22 March 2011 and made between the CLIENT of the one part and MOTT MacDONALD LIMITED a company incorporated under the Companies Acts (Company Number 01243967) whose registered address is at Mott MacDonald House, 8-10 Sydenham Road, Croydon, Surrey CR0 2EE ("the SERVICE PROVIDER") of the other part, the SERVICE PROVIDER is to execute certain services ("the Ordered Services") in accordance with the terms and conditions of the Contract.

# NOW IT IS HEREBY AGREED as follows:

The Guarantor hereby absolutely irrevocably and unconditionally guarantees to the CLIENT the due and punctual performance by the SERVICE PROVIDER of all the obligations on the part of the SERVICE PROVIDER under or pursuant to the Contract ("the Terms") and (as a separate stipulation and as primary obligor) agrees that if the SERVICE PROVIDER shall in any respect commit any breach of or fail to fulfil any of the Terms, then the Guarantor will forthwith perform and fulfil in place of the SERVICE PROVIDER each and every Term in respect of which the SERVICE PROVIDER has defaulted or which is unfulfilled by the SERVICE PROVIDER. The Guarantor shall be liable to the CLIENT for all losses, damages, expenses, liabilities, claims, costs or proceedings which the CLIENT may suffer or incur by reason of the said failure or breach PROVIDED THAT the Guarantor's aggregate liability arising under this Guarantee shall not exceed the SERVICE PROVIDER'S liability under the Contract.

# STANDARD MODEL CONTRACT 1

### RELATING TO PROFESSIONAL SERVICES

- The Guarantor shall be, and continue to be, liable under this Guarantee even if the Contract is or becomes for any reason not binding on, or unenforceable against, the SERVICE PROVIDER, for any reason whatsoever. No alterations in the Contract, or in the Ordered Services, and no extension of time, forbearance or forgiveness, nor any act, matter or thing whatsoever except an express release by the CLIENT, shall in any way release or reduce any liability of the Guarantor hereunder. References to the Contract in this Guarantee shall include all amendments, variations and additions to it, whether made before or after the date hereof.
- This Guarantee shall remain in full force and effect until performance in full of the Terms, notwithstanding:
  - the insolvency or liquidation of the SERVICE PROVIDER, the Guarantor or any other person;
  - (b) any disclaimer of the Contract by a liquidator of the SERVICE PROVIDER; and/or any feature of the Contract, the negotiations prior to the SERVICE PROVIDER and the CLIENT entering into the Contract, or the performance of the Contract, making it ineffective or unenforceable.
- 4 Until the Terms have been unconditionally and irrevocably performed in full the Guarantor shall not by virtue of any performance or payment made by it hereunder:
  - be subrogated to any rights, security or moneys held or received or receivable by the CLIENT; or
  - (b) be entitled to exercise any right of contribution from any co-surety in respect of such performance and liabilities under any other guarantee, security or agreement; or
  - (c) exercise any right of set-off, retention, deduction, reduction or counterclaim against the SERVICE PROVIDER or any such co-surety; or
  - (d) receive, claim or have the benefit of any payment, security or indemnity from the SERVICE PROVIDER or any such co-surety; or
  - (e) claim as a creditor of the SERVICE PROVIDER or any such co-surety in competition with the CLIENT.
- No delay or omission of the CLIENT in exercising any right, power or privilege hereunder shall impair such right, power or privilege or be construed as a waiver of such right, power or privilege nor shall any single or partial exercise of any such right, power or privilege preclude any further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies of the CLIENT herein provided are cumulative and not exclusive of any rights or remedies provided by law.
- A waiver given or consent granted by the CLIENT under this Guarantee will be effective only if given in writing and then only in the instance and for the purpose for which it is given.
- 7 (a) If at any time any one or more of the provisions of this Guarantee is or becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions hereof shall not be in any way affected or impaired thereby.

# STANDARD MODEL CONTRACT 1

# RELATING TO PROFESSIONAL SERVICES

- (b) As a separate and alternative stipulation the Guarantor unconditionally and irrevocably agrees that any sum expressed to be payable by it or obligation to be performed by it under this Guarantee but which is for any reason (whether or not now existing and whether or not now known or becoming known to the Guarantor) not recoverable from or enforceable against the Guarantor on the basis of a guarantee shall nevertheless be recoverable from or enforceable against the Guarantor as if the Guarantor were the sole principal debtor or obligor (where relevant).
- Any notice, demand or other communication to be served under this Guarantee may be served upon either party hereto only by posting by first class post or delivering the same or sending the same by facsimile transmission to the party to be served at its address or facsimile number shown below:

#### CLIENT:

Director of Finance NHS Lothian Waverley Gate 2-4 Waterloo Place Edinburgh EH1 3EG

G	uai	raı	nt	O	r
•	uu	•		•	

Company Secretary
Mott MacDonald Group Limited
Mott MacDonald House
8-10 Sydenham Road,
Croydon
Surrey CR0 2EE

Fax:		

Fax:

or at such other address or number as it may from time to time notify in writing to the other party.

- A notice or demand served by first class post shall be deemed duly served on the second business day after the date of posting and a notice or demand sent by facsimile transmission shall be deemed to have been served at the time of transmission unless served after 5.00 p.m. in the place of intended receipt in which case it will be deemed served at 9.00 a.m. on the following business day. For the purposes of this paragraph "business day" means a day on which commercial banks are open for business in London.
- In proving service of any notice it will be sufficient to prove, in the case of a letter, that such letter was properly stamped or franked first class, addressed and placed in the post and, in the case of facsimile transmission, that such facsimile was duly transmitted on a business day to a current facsimile number of the addressee at the address referred to above.
- The CLIENT shall be entitled to assign or transfer all or any of the CLIENT'S rights under this Guarantee without consent of the Guarantor.
- Nothing in this Guarantee confers or purports to confer any right to enforce any of its terms on any person who is not a party to it (except any successor or any permitted assignee of such a party).
- The proper law of this Guarantee shall be the same as that of the Contract. Where the proper law of this Guarantee is Scots law, the parties prorogate the non-exclusive jurisdiction of the Scottish courts.

IN WITNESS whereof these presents consisting of this and the three preceding pages are executed as follows:

[Testing clause or appropriate signing blocks to be inserted into engrossment in usual Scots law manner]

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# **SCHEDULE 2-7**

# SERVICE PROVIDER'S CERTIFICATE OF EMPLOYER'S AND PUBLIC LIABILITY INSURANCE

OGCb	uying.solutions Framework Agreemen	t No. [ ] Dated [ ]:			
Ordere	ed Services:				
CLIEN'	T'S Reference No:				
1	This certificate relates to a contract ("the Contract") dated [] for the provision of certain services, made between				
	of				
	("the CLIENT") and				
	("the SERVICE PROVIDER"), and is furnished to the CLIENT.				
2	Clauses 16(2) and 16(3) of the Contract require the SERVICE PROVIDER to effect and maintain employer's and public liability insurance, in an amount not less than that stated in the Contract.				
3	We certify that the SERVICE PROVIDER has complied with the above requirements by effecting and maintaining insurance as follows:-				
	Employer's Liability				
	Insured:				
	Insurers:				
	Policy No:				
	Period of Insurance:	from	20[		
	to		20[		
	Amount Insured:	£ (not less than required by the Contract)			
	Public Liability				
	Insured:				
	Insurers:				
	Policy No:				
	Period of Insurance:	from	20[		
	to		20[		

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Amount Insured:	£ (not less than required by the Contract)	
Excess or Deductible: per claim	£	
SIGNED by		
for and on behalf of		
*SERVICE PROVIDER'S Insurance Broke	er/ SERVICE PROVIDER'S Insurers	
Tel:		
Fax:		
Date:		20[]
*Delete inapplicable items.		

#### **SCHEDULE 2-8**

# SERVICE PROVIDER'S CERTIFICATE OF PROFESSIONAL INDEMNITY INSURANCE

OGC buying.solutions Framework Agreement No. [and Date]:

Ordered	Services:
---------	-----------

#### **CLIENT'S Reference No:**

1	This certificate relates to a contract ("the Contract") dated [ certain services, made between	] for the provision of
	of	

("the CLIENT") and

("the SERVICE PROVIDER"), and is furnished to the CLIENT.

- Clause 16(9) of the Contract requires the SERVICE PROVIDER to effect and maintain professional indemnity insurance, in an amount not less than that stated in the Contract.
- We certify that the SERVICE PROVIDER has complied with the above requirements by effecting and maintaining insurance as follows:-

Insured:

Insurers:

Policy No:

Period of Insurance: from 20[]

to

Amount Insured:

(not less than required by the Contract) for each and every claim or series of claims arising out of or attributable to the same originating cause, without any limit being placed on the number of claims (provided that such limit of indemnity may be in the aggregate for each year of insurance in respect of claims for pollution, contamination and date recognition).

20[]

\_\_\_\_\_

Excess or Deductible:	£	per claim
SIGNED by		
for and on behalf of		
*SERVICE PROVIDER'S Insurance Broke	er/ SERVICE PROVIDER'S Insurers	3
Tel:		
Fax:		
Date:	20[ ]	
*Delete inapplicable items.		

# SCHEDULE 2-9 CLIENT'S PROPERTY

- All CLIENT'S Property shall remain the property of the CLIENT and where such CLIENT'S Property is equipment, such equipment shall be used in the performance of the Ordered Services and for no other purpose without prior Approval.
- [2. The CLIENT shall be responsible for the repair or replacement of CLIENT'S Property unless the need for repair or replacement is caused by the SERVICE PROVIDER'S failure to comply with Clause 4, of this Schedule (CLIENT'S Property), or by the negligence or default of the SERVICE PROVIDER.] [Option A].
- [2. The SERVICE PROVIDER shall be responsible for the repair and/or replacement of CLIENT'S Property save where the cost of such repair and/or replacement, assessed by the CLIENT'S Representative, shall exceed the amount stated in the Abstract of particulars, in which case the CLIENT shall be responsible for such repair and/or replacement unless such repair and/or replacement was caused by the SERVICE PROVIDER's failure to comply with Clause 4, of this Schedule (CLIENT'S Property), or by the negligence and default of the SERVICE PROVIDER.] [Option B].
- [2. The SERVICE PROVIDER shall be responsible for the repair and/or replacement of the CLIENT'S Property unless the need for such repair or replacement was caused by the negligence or default of the CLIENT after the Service Commencement Date.] [Option C].
- [3. The SERVICE PROVIDER shall be responsible for his own costs resulting from any failure of CLIENT'S Property, unless he can demonstrate that the CLIENT had caused undue delay in his replacement or repair where the CLIENT was responsible for such replacement or repair.] [Delete if Option C used].
- 4. The SERVICE PROVIDER shall maintain all items of CLIENT'S Property in good and serviceable condition and in accordance with the manufacturer's recommendations.
- 5. The SERVICE PROVIDER shall be liable for any loss of or damage to any CLIENT'S Property save to the extent that the SERVICE PROVIDER is able to demonstrate that such loss or damage was caused or contributed to by the negligence or default of the CLIENT.
- 6. The SERVICE PROVIDER shall not in any circumstances have a lien on any CLIENT'S Property and shall take all steps necessary to ensure that the title of the CLIENT and the exclusion of any lien are brought to the attention of any third party dealing with any CLIENT'S Property.

#### **SCHEDULE 2-10**

#### **Dispute Resolution**

#### 1. SETTLEMENT OF DISPUTES

- 1.1 Any dispute or difference between the parties arising out of or relating to this Contract (a "Dispute") shall be referred, by either party, to the CLIENT'S Representative and the Contract Manager for resolution.
- 1.2 If any Dispute cannot be resolved within 10 Working Days after it has been referred under paragraph 1.1, the Dispute shall be referred to an authorised senior officer of the CLIENT and an authorised senior officer of the SERVICE PROVIDER for resolution.
- 1.3 If any Dispute cannot be resolved within 10 Working Days after it has been referred under paragraph 1.2, then the Dispute shall be further referred to mediation in accordance with the provisions of paragraph 2.

#### 2. MEDIATION

- 2.1 The procedure for mediation pursuant to paragraph 1.3 and consequential provisions relating to mediation shall be as follows:
  - 2.1.1 a neutral adviser or mediator ('the Mediator') shall be chosen by agreement between the CLIENT and the SERVICE PROVIDER or, if they are unable to agree upon the identity of the Mediator within ten (10) Working Days after a request by one party to the other, or if the Mediator agreed upon is unable or unwilling to act, either party shall within ten (10) Working Days from the date of the proposal to appoint a Mediator or within ten (10) Working Days of notice to either party that he is unable or unwilling to act, apply to the Centre for Effective Dispute Resolution ('CEDR') to appoint a Mediator;
  - 2.1.2 the CLIENT and the SERVICE PROVIDER shall within ten (10) Working Days of the appointment of the Mediator meet with him in order to agree a programme for the exchange of all relevant information and the structure to be adopted for negotiations to be held. The parties may at any stage seek assistance from the CEDR to provide guidance on a suitable procedure.
- 2.2 Unless otherwise agreed by the CLIENT and the SERVICE PROVIDER, all negotiations connected with the Dispute and any settlement agreement relating to it shall be conducted in confidence and without prejudice to the rights of the parties in any future proceedings.
- 2.3 In the event that the CLIENT and the SERVICE PROVIDER reach agreement on the resolution of the Dispute, the agreement shall be reduced to writing and shall be binding on both parties once it is signed by a duly authorised senior officer of the CLIENT and a duly authorised senior officer of the SERVICE PROVIDER.
- 2.4 Failing agreement, the CLIENT or SERVICE PROVIDER may agree to invite the Mediator to provide a non-binding but informative opinion in writing. No such invitation shall be made without the written consent of both parties. If it is agreed that such an invitation shall be made, the opinion shall be provided on a without prejudice basis and shall not be used in evidence in any proceedings relating to this Contract without the prior written consent of both parties.
- 2.5 The CLIENT and the SERVICE PROVIDER shall each bear their own costs in relation to any reference made to the Mediator and the fees and all other costs of the Mediator shall be borne jointly in equal proportions by both parties unless otherwise directed by the Mediator.

#### STANDARD MODEL CONTRACT 1

#### RELATING TO PROFESSIONAL SERVICES

- 2.6 Work and activity to be carried out under this Contract shall not cease or be delayed during the dispute resolution process set out in paragraph 1 and this paragraph 2.
- 2.7 In the event that the CLIENT and the SERVICE PROVIDER fail to reach agreement in the structured negotiations within forty (40) Working Days of the Mediator being appointed, or such longer period as may be agreed, then the Dispute may, subject to the agreement of both parties, be referred to arbitration in accordance with the provisions of paragraph 3 and failing such agreement, may be referred to the Courts in accordance with paragraph 4.

#### 3. ARBITRATION

- In the event that a Dispute is not resolved pursuant to paragraph 2 (or, where the matter has been referred to adjudication, under paragraph 5), the parties may, if they both agree, refer the matter to arbitration in accordance with this paragraph 3.
- 3.2 The party seeking to initiate the arbitration shall give a written Notice of Arbitration to the other party. The Notice of Arbitration shall
  - 3.2.1 state that the Dispute is referred to arbitration;
  - 3.2.2 state the particulars of this Contract; and
  - 3.2.3 provide a brief summary of the subject of the Dispute.
- 3.3 Unless otherwise agreed in writing by the CLIENT and the SERVICE PROVIDER, the provisions of the Arbitration (Scotland) Act 2010 shall govern the arbitration commenced pursuant to this paragraph 3.
- 3.4 Any Dispute, if referred to arbitration in accordance with this paragraph 3, shall be resolved by arbitration under the Arbitration (Scotland) Act 2010.
- 3.5 It is agreed between the CLIENT and the SERVICE PROVIDER that for the purposes of the arbitration, the arbitrator shall not have the power to make provisional awards.
- 3.6 For the avoidance of doubt it is agreed by the CLIENT and the SERVICE PROVIDER that the arbitration process and anything said, done or produced in or in relation to the arbitration process (including any awards) shall be confidential between the parties, except as may be lawfully required in judicial proceedings relating to the arbitration or otherwise. No report relating to anything said, done or produced in or in relation to the arbitration process may be made to any body other than the tribunal, the CLIENT and the SERVICE PROVIDER, their legal representatives and any person necessary to the conduct of the proceedings, without the agreement of all parties to the arbitration.
- 3.7 The arbitration proceedings shall take place in Edinburgh and in the English language and the arbitration proceedings shall be governed by, and interpretations made in accordance with, Scots law.
- 3.8 The CLIENT and the SERVICE PROVIDER shall each bear their own costs in relation to any reference made to the arbitrator and the fees and all other costs of the arbitrator shall be borne jointly in equal proportions by both parties unless otherwise directed by the arbitrator.
- 3.9 In the event that the CLIENT and the SERVICE PROVIDER do not agree to refer the matter to arbitration, then any Dispute may be referred to the Courts in accordance with paragraph 4.

#### 4. LEGAL PROCEEDINGS

Subject to paragraphs 1-3, this Contract shall be subject to the exclusive jurisdiction of the Scottish Courts to which both parties hereby submit.

#### STANDARD MODEL CONTRACT 1

#### **RELATING TO PROFESSIONAL SERVICES**

#### 5. ADJUDICATION

- 5.1 The provisions of paragraphs 1 4 above shall be without prejudice to either party's right to refer any Dispute to adjudication in accordance with the provisions of this paragraph 5.
- 5.2 The CLIENT or the SERVICE PROVIDER may at any time notify the other of intention to refer a Dispute arising under, out of, or relating to, the Contract to adjudication. Within 7 Days of such notice, the Dispute may by further notice be referred to an adjudicator to be nominated by the Law Society of Scotland. Subject only to paragraph 5.5, both the CLIENT and the SERVICE PROVIDER shall accept any such nomination as final and binding.
- 5.3 The notice of referral shall set out the principal facts and arguments relating to the Dispute. Copies of all relevant documents shall be enclosed with the notice. A copy of the notice and enclosures shall at the same time be sent by the party giving the notice to the other party.
- 5.4 If the person nominated as the adjudicator by the Law Society of Scotland is unable to act, or fails to provide the notification required by paragraph 5.5, or ceases to be independent of the CLIENT or the SERVICE PROVIDER, he shall be replaced by another adjudicator also to be nominated by the Law Society of Scotland. Again, and subject only to paragraph 5.5, both the CLIENT and the SERVICE PROVIDER shall accept any such further nomination as final and binding.
- 5.5 It shall be a condition precedent to the appointment of an adjudicator that he shall notify both parties that he will comply with this paragraph 5 and its time limits.
- The adjudicator shall be appointed within 7 Days of the giving of a notice of intention to refer a Dispute to adjudication under paragraph 5.2. Any replacement adjudicator nominated in accordance with paragraph 5.4 shall likewise be appointed within 7 Days of the need for such a replacement having become apparent. For all such appointments, the form of adjudicator's appointment shall be the Model Form of Adjudicator's Appointment as set out in "GC/Works/5 Model Forms (1998)". A copy of each such appointment shall be supplied to each party. No such appointment shall be amended or replaced without the consent of both parties.
- 5.7 The CLIENT AND THE SERVICE PROVIDER may submit representations to the adjudicator not later than 14 Days from the receipt of the notice of referral.
- The adjudicator shall notify his decision to the CLIENT AND THE SERVICE PROVIDER not earlier than 14 and not later than 28 Days from the receipt of the notice of referral, or such longer period as is agreed by the CLIENT and the SERVICE PROVIDER after the Dispute has been referred. The adjudicator may extend the period of 28 Days by up to 14 Days, with the consent of the party by whom the Dispute was referred. The adjudicator's decision shall state how the cost of the adjudicator's fee or salary (including overheads) shall be apportioned between the parties, and whether one party is to bear the whole or part of the reasonable legal and other costs and expenses of the other relating to the adjudication. Where the adjudicator apportions liability to each party (whether in equal or some other proportion) in relation to the payment of the adjudicator's fee or salary (including overheads), the liability of each party shall be limited to the amount apportioned to it by the adjudicator.
- The decision of the adjudicator is binding until the Dispute is finally determined by legal proceedings, by arbitration (if the parties agree to arbitration under paragraph 3.7) or by agreement and the parties do not agree to accept the decision of the adjudicator as finally determining the Dispute.
- 5.10 The adjudicator shall act impartially.
- 5.11 The adjudicator may take the initiative in ascertaining the facts and the law.

## STANDARD MODEL CONTRACT 1

#### **RELATING TO PROFESSIONAL SERVICES**

- 5.12 If requested by one of the parties to the dispute, the adjudicator shall provide reasons for his decision. Such requests may only be made within 14 Days of the decision being notified to the requesting party.
- 5.13 The adjudicator shall not be liable for anything done or omitted in the discharge or purported discharge of his functions as adjudicator, unless the act or omission is in bad faith. Any employee or agent of the adjudicator is similarly protected from liability.

This is the copy of the Order referred to in the foregoing Contract between Lothian Health Board and Mott MacDonald Limited relative to the provision of project management / technical advisory and design team services for the proposed NPD project for the Royal Hospital for Sick Children / Department of Clinical Neurosciences at the Royal Infirmary of Edinburgh.

#### **ORDER FORM**

Order Number: NM66866

Dated: 22<sup>nd</sup> March 2011

To be quoted on all correspondence relating to this Order.

FROM:

**LOTHIAN HEALTH BOARD** (also known as NHS Lothian), Waverley Gate, 2-4 Waterloo Place, Edinburgh EH1 3EG

Name:

Susan Goldsmith

Job Title:

Director of Finance

Telephone No.:

Email Address:

TO:

#### MOTT MacDONALD LIMITED

Caledonian Exchange

3rd Floor

19A Canning Street

Edinburgh EH3 8EG

SERVICES TO BE PROVIDED AT:

Royal Infirmary of Edinburgh

**INVOICE ADDRESS:** 

NHS Lothian Finance Services

Accounts Payable Department

Pentland House 47 Robbs Loan Edinburgh EH14 1TY

This Order specifies all the variables necessary for the completion of the Contract in respect of the provision of project management / technical advisory and design team services for the proposed NPD project for the Royal Hospital for Sick Children / Department of Clinical Neurosciences at the Royal Infirmary of Edinburgh.

#### 2. THE SERVICES

As set out in the draft Contract issued with this Order.

#### 3. THE CHARGES

As set out in the draft Contract issued with this Order.

#### 4. TIMETABLE AND OTHER DETAILS

Service Commencement Date: 22<sup>nd</sup> March 2011

Contract Period (measured from the Commencement Data):

Up to 22<sup>nd</sup> March 2015 or commencement of availability / practical completion of the Project under the NPD Project Agreement, whichever is the earlier.

Clause 16.3: the public liability insurance to be effected and maintained by the SERVICE PROVIDER shall be in an amount not less than Ten Million Pounds (£10 million) Sterling) for each and every claim or series of claims arising out of or attributable to the same originating cause.

Clause 16.9: the professional indemnity insurance to be effected and maintained by the SERVICE PROVIDER shall be in an amount not less than Ten Million Pounds (£10 million) Sterling) for each and every claim or series of claims arising out of or attributable to the same originating cause.

Clause 51: It shall be a condition of the Contract that the SERVICE PROVIDER and the Sub-Contractors shall each enter into a direct CLIENT/Sub-Contractor Agreement (Warranty) in the form specified by the CLIENT, or such other form as the CLIENT may agree; and that the SERVICE PROVIDER shall deliver to the CLIENT each such CLIENT/Sub-Contractor Agreement, duly executed, within 28 (twenty-eight) Days of the Service Commencement Date or (if later) the CLIENT's approval of the relevant Sub-Contractor.

(For the avoidance of doubt, the CLIENT does not require the ultimate holding company, if any, of any of the Sub-Contractors to enter into guarantees in respect of the Sub-Contractors' obligations under such CLIENT/Sub-Contractor Agreements.)

Clause 53: a parent company guarantee from the SERVICE PROVIDER's ultimate parent company is required in terms of Clause 53.

#### 5. PROPOSED SPECIAL TERMS

All as per the tracked changes on the attached draft of the Model Contract.

#### 6. PREFERRED MODEL CONTRACT

Model Contract	Please tick as appropriate	Alternative, Additional or Optional Clauses
Standard Model Contract (Schedules 2A and 13)	<b>✓</b>	Please select required "Alternative and/or Additional Clauses" from <b>Part A</b> below
NEC Model Contract (Schedule 2B)	(Not selected)	Please select required Optional Clauses from <b>Part B</b> on next page

#### **PART A**

#### STANDARD MODEL CONTRACT

Alterna	ative and/or Additional Clauses	Tick if required
6.1.	Private Authorities	
6.2.	Freedom of Information	
6.3.	Intellectual Property Rights	
6.4	Housing Grants Construction and Regeneration Act 1996	
6.5	Duties of Care Fitness for purpose and Standard of Materials	(Add new Clause 9.3)
6.6(a)	DPR – Alternative Option A	
6.6(b)	DPR – Alternative Option B	
6.7.	Security Measures	

6.8.	Access to MOD Sites	
6.9	Novation	
6.10	Collateral Warranties	
6.11	TUPE	
6.12	CRB Checks	

#### **PART B**

### **NEC MODEL CONTRACT**

(Not selected)

Option	al Clauses	Notes	Complete as appropriate
	Main Option	Insert A, C or E	N/A
	Dispute Resolution Option	Insert W1 or W2	N/A
Secon	Main Option Dispute Resolution Option  Secondary Options  (1 Price adjustment for inflation (2 Changes in the law (3 Multiple currencies (4 Parent company guarantee (5 Sectional completion (6 Bonus for early completion (7 Delay damages (8 Collateral warranty agreements (9 Transfer of rights (10 Employer's Agent (11 Termination by the Employer (12 Partnering	Notes	Tick if required
X1	Price adjustment for inflation	Retain and complete Optional Statement	N/A
X2	Changes in the law	Delete. Not used	N/A
Х3	Multiple currencies	Delete. Not used	N/A
X4	Parent company guarantee	Delete. Not used	N/A
X5	Sectional completion	Delete if not required	N/A
X6	Bonus for early completion	Delete if not required	N/A
X7	Delay damages	Delete if not required	N/A
X8	Collateral warranty agreements	Delete if not required	N/A
X9	Transfer of rights	Delete. Not used	N/A
X10	Employer's Agent	Delete if not required	N/A
X11	Termination by the Employer	Delete if not required	N/A
X12	Partnering	Delete if not required	N/A
X13	Performance bond	Delete if not required	N/A
X18	Limitation of liability	Delete if not required	N/A

X20	Key performance indicators	Delete if not required. Always delete if using Option X12	N/A	
Y(UK)2	The Housing Grants, Construction and Regeneration Act 1996	Delete if services do NOT involve a construction contract/construction operations as (widely) defined by the Act.	N/A	
Y(UK)3	The Contracts (Rights of Third Parties) Act 1999	Delete if not required	N/A	
Option Z: A	dditional conditions of contract	Notes	Tick if required	
Z1 I	Freedom of information	Recommended for all appointments	N/A	
Z2 1	Notices	Recommended for all appointments	N/A	
Z3 F	Fair payment charter	Recommended for all appointments	N/A	
Z4 F	Persons dealing with this contract	Recommended for all appointments	N/A	
Z5 ι	Lead designer	Recommended for all appointments	N/A	
Z6 [	Disputes with Others	Recommended for all appointments	N/A	
Z7 (	Conflicts of interest	Recommended for all appointments	N/A	
Z8 /	Assignment	Recommended for all appointments	N/A	
Z9 r	Novation	Recommended for all appointments	N/A	
Z10 F	Payment forecast	Recommended for all appointments	N/A	
Z11 s	Suspension for non-payment	Recommended for all appointments	N/A	
Z12 F	Responsibility for documents	Recommended for all appointments	N/A	
Z13 (	Official secrets	Recommended for all appointments	N/A	
Z14 (	Confidentiality	Recommended for all appointments	N/A	
Z15 I	nsurance	Recommended for all appointments	N/A	

	Z16	Professional indemnity insurance	Recommended for all appointments	N/A	
	Z17	Public liability insurance	Recommended for all appointments	N/A	
	Z18	Termination Events	Recommended for all appointments	N/A	
	Z19	Unincorporated joint venture	Recommended for all appointments	N/A	
	Z20	Security concern	Recommended for all appointments	N/A	
	Z21	Corrupt gifts and payment of commission	Recommended for all appointments	N/A	
	Z22	W3 Negotiation	Recommended for all appointments	N/A	
	Z23	W4 Mediation	Recommended for all appointments	N/A	
	Z24	Responsibility for work by Others	Recommended for appropriate appointments only	N/A	
	Z25	Consultant's obligation to ensure	Recommended for appropriate appointments only	N/A	
	Z26	Direct appointment of Others	Recommended for appropriate appointments only	N/A	
	Z27	Approval of Subconsultants	Recommended for appropriate appointments only	N/A	
	Z28	Environmental requirements	Recommended for appropriate appointments only	N/A	
	Z29	Access to property	Recommended for appropriate appointments only	N/A	
f	Z30	Presentations	Recommended for appropriate appointments only	N/A	
	Z31	Tender documents and contracts	Recommended for appropriate appointments only	N/A	
	Z32	Recovery of VAT	Recommended for appropriate appointments only	N/A	
	Z33	Recovery of other sums	Recommended for appropriate appointments only	N/A	

Z34	Subconsultants' collateral warranty agreements	Recommended for appropriate appointments only	N/A
Z35	Performance bond	Recommended for appropriate appointments only	N/A
Z36	The Housing Grants, Construction and Regeneration Act 1996	Recommended for appropriate appointments only	N/A
Z37	Consultant's records	Recommended for limited use only	N/A
Z38	Contract Standard	Recommended for limited use only	N/A
Z39	Copyright	Recommended for limited use only	N/A
Z40	Termination following prolonged suspension	Recommended for limited use only	N/A
Z41	Employer's Property Option A / B / C will apply (Delete as appropriate)	Recommended only for Term Contracts	N/A
Z42	Security measures	Recommended for limited use only	N/A
Z43	Access to MOD sites	Recommended for limited use only	N/A
Z44	Criminal Records Bureau	Recommended for limited use only	N/A
Z45	The Transfer of Undertakings (Protection of Employment) Regulations 2006	Recommended for limited use only	N/A

#### 7. POINTS OF CONTACT FOR DISPUTE RESOLUTION

CLIENT's first point of contact for dispute resolution purposes:

lain Graham, Director of Capital Planning and Projects, NHS Lothian

CLIENT's second point of contact for escalation of dispute:

Susan Goldsmith, Director of Finance, NHS Lothian

#### 8. **OPTION FOR FORMAT OF CONTRACT** (delete as appropriate)

Please send me the Contract duly executed by an authorised officer of the SERVICE PROVIDER

or

Please send me a statement that a contract has been formed using the terms and conditions in the Model Contract, as amended by the special terms referred to at item 5 above, and as augmented by the information provided or referred to in this Order, such information being replicated or referenced in that statement.

(Note: at the option of the CLIENT, following the CLIENT's receipt of the SERVICE PROVIDER's acceptance statement as referred to immediately above, the SERVICE PROVIDER may also be required to formally execute an engrossment of the Contract, which engrossment will be prepared by or on behalf of the CLIENT.)

Royal Hospital for Sick Children & Department of Clinical Neurosciences Technical Advisor Scope 17-Mar-11 v12

#### Section A

## CORE TECHNICAL ADVISOR ROLE UP TO FINANCIAL CLOSE

Ref	Description	Da	vis Lan	gdon	Mot	tt Macc	ionald	Thomson Gray			Turner & Townsend				F	М		Totals			Notes
	- " 11	Role	Man	Fee	Role	Man	Fee	Role	Man	Fee	Role	Man	Fee	DLFM	Fee	MMFM	Fee	Task Total Man Davs	Section Total Man Days	Total Fee	
	Management and Coordination	KOIG	Days	,	Role	Days		110.0	Days			Days						Days	234		
	Act as Lead Technical Advisor and point of contact		0	£0		234	£121,914			£0			£0		£0		£0	234		£121,914	
1	for NHSL Client	_		£U		234	2121(314			2.0			20		20		20	201			====
	Business Cases			_															166		
2	Monitor, direct and report to NHS Health Board Coordination of all FBC information required from	L	36	£18,756	S	10	£5,210	S	8	£3,960			03		£0		£0	54		£27,926	
3	advisory team by NHSL Business Case Manager Manage and coordinate the review of any design	L	42	£21,882			£0	S	3	£1,485			£0		£0		£0	45		£23,367	
4	proposals against the scheme brief Assist the Financial Advisor in the Development,				L	0	£0			£0			£0		£0		£0	0		£0	
	Ownership and maintenance of suitably detailed Public Sector Comparator/Conventional																				
5	Procurement Assessment Model including regular provision (at least quarterly) of Value for Money	R	4	£2,084	S	8	£4,168	L	10	£4,950			£0	1	£521	1	£521	24		£12,244	
	assessments Assist in the preparation of the commercial element					-								_	_						-
6	of the Full Business Case. This shall include full monitoring of costs, excluding whole life costs, on						£0	L.	5	£2,475			£0		£0		£0	5		£2,475	
0	the basis of the bids and any refinements which develop						2.0			12,470			20								
7	Contribution to PSC as required (FM only)  Contribution to PSC as required (Lifecycle only)	L S	0	£0 £0	S	0	£0 £0	S	2 3	£990 £1,485			£0	3	£1,563 £1,563	4	£2,084 £2,084	9		£4,637 £5,132	
9	Management of Key Stage Reviews 1 to 4	L	9	£4,689	S	5	£2,605	S	4	£1,980			£0		£0	1	£521	19		£9,795	
	All items above are FBC only. No input to OBC required by NHSL							_													
	Procurement of NPD Co including Competitive	_							_		_								521		
	Dialogue																				
	Prepare Invitation to Partake in Dialogue (ITPD) including Output Specification, Payment												3,4220				000			0400 465	
10	Mechanism etc, for Procurement process. All prepared in association with client legal and	L	36	£18,756	S	214	£111,494			£0			03	24	£12,504	45	£23,445	319		£166,199	
11	financial advisors.  Ownership of Output Specification coordinating	R	0	£0	L	0	£0			£0			£0	24	£12,504	0	£0	24		£12,504	
11	inputs from team Ownership and coordination of Payment	S	0	£0	L	20	£10,420			£0			£0	10	£5,210	0	£0	30		£15,630	
13	Mechanism Prepare Reference Design documentation, as			£0	L	10	£5,210			£0			£0	1	£0	0	£0	10		£5,210	
14	appropriate, for inclusion in ITPD Carry out any soft market testing considered	_	13	£6,773	s	2	£1,042			£0			£0		£0	1	£521	16		£8,336	
	necessary by the client Contribution of all necessary D& C and FM-related		"						1											£0	
15	Input to the Payment Mechanism and Output Specification in conjunction with NHSL			03	L	0	£0			£0			£0		£0		£0	0		T.U	
16	Check Reference Design for compliance with all appropriate NHSL and legislative guidelines and			£0	L	5	£2,605			£0			£0		£0	0	£0	5		£2,605	
	requirements (list as pre-agreed with NHSL) and identify any derogations				_		,								1780.1			555			
17	Develop approved and final Room Data Sheets appropriate for inclusion in bid documents in			£0	L	4	£2,084			£0			£0		£0	1	£521	5		£2,605	
18	conjunction with NHSL Finalise Accommodation Schedule and Adjacency		-	£0	L	1	£521			£0	-		£0		£0		£0	1		£521	
19	Matrix in conjunction with NHSL Preparation of Equipment Responsibility Matrix			£0	L	26	£13,546			£0			EO	1	£0		£0	26		£13,546	
	(linked to outputs of the reference design) Receive H&S information relating to the proposed		-		-	20						-					- 22				
20	site & ERI interface from NHSL and incorporate into Output Specification			60			£0			£0	L	64	£31,680		£0		£0	64		£31,680	
21	Advise NHSL on the correct level and balance of the Availability and Performance Standards,	s	0	£0	L	0	£0			60			£0	0	£O	0	£0	0		£0	
	Handback Provisions and other components within the payment mechanism									you		_	17.21				04 800			£10,941	
22	Technical Input to Project Agreement The Legal Advisor shall have responsibility for	S	0	£0	L	18	£9,378			£0	-		£0		£0	3	£1,563	21		£10,941	
	ensuring consistency between the ITPD and the contract documents										_	_						0		£U	
	All items above assume contract to be based on Standard PPP Form Contract																				
	Prepare and issue Project Information Notice	$\vdash$	1								$\vdash$	_			-				33		<b></b>
	(PIN) and Bidders Day																				
23	Facilitate decision over whether PIN is to be used Prepare PIN in conjunction with NHSL and legal	L	4	£2,084	S	0	£0			£0			£0 £0		£0 £0		£0	10		£2,084 £5,210	
24 25	advisors  Arrange and attend Bidders' Day in conjunction with		9	£4,689	S	5	£521 £2,605	s	2	£990		-	£0	-	£0		£521	19		£9,847	
25	NHSL	L	11	15,731	"	0	1,2,605	"	2	1990			1.0		LU	Ė	1,521	19		13,047	
	Pre-Qualification Process								1										174		
26	Prepare and issue PQQ pack in conjunction with NHSL and legal and financial advisors	L	25	£13,025	R	2	£1,042	s	4	£1,980			£0	4	£2,084		£0	35		£18,131	
27	Administration of Clarifications	L	9	£4,689	S	4	£2.084	S	2	£990			£0	9	£4,689		£0	24		£12,452	
28 29	Evaluation of PQQs Prepare debriefing notes for unsuccessful bidders	L	40 7	£20,840 £3,647	S	37	£19,277 £0	S	6	£2,970 £0			£0	4	£2,084 £0	4	£2,084 £0	91 7		£47,255 £3,647	
30	Coordination of evaluations, reporting/recommendations to NHSL and delivery	L	14	£7,294			£0	s	3	£1,485			£0		£0		£0	17		£8,779	
	of debriefs as required																				
	Administer Competitive Dialogue Process with shortlisted Bidders (based on 3 shortlisted																		499		
	Bidders)							-	1	-		-									
31	Facilitate review of Competitive Dialogue Strategy and schedule	L	8	£4,168	s	1	£521			£0			60	4	£2,084		03	13		£6,773	
32	Prepare Competitive Dialogue documentation (with legal and financial sovisors) detailing programme,	L	40	£20,840	s	18	£9,378			£0			£0		£0	2	£1,042	60		£31,260	
33	structure, agendas, interim submissions etc Attend formal CD meetings (include for 3 formal	-	18	£9,378	s	36	£18,756	s	2	£990		-	£0	9	£4,689	9	£4.689	74		£38,502	-
34	and 3 'informat' with each of the Bidders. Responsibility for structure and review of all D&C	s	17	£9,378	L	76	£18,756	5	-	£990		-	£0	1	-	10	£4,689 £5,210			£38,502 £57,310	
	and FM elements of CD process Coordinate and document all necessary	-	17		1			-	-	1:0		-		7	£3,647			110	E OF		
35	stakeholder input to D&C and FM related elements of CD process.			£0	L	52	£27,092			£0			£0		£0	7	£3,647	59		£30,739	
36	Allowance for dealing with Clarifications during CD process.	L	30	£15,630	s	70	£36,470	s		£0			£0	5	£2,605	5	£2,605	110		£57,310	
37	Coordinate evaluation of and feedback to interim submissions (if any)	L	36	£18,756		30	£15,630			£0			£0	7	£3,647		£0	73		£38,033	
38	Provide feedback on all D&C and FM -related elements of interim submissions				s	0	£0						£0		£0		£0	0		£0	
													-								
	Preparation of final submissions by bidders																		89		
39	Develop and finalise ITSFB documentation	L	30	£15,630	S	14	£7,294			£0			£0	9	£4,689		£0	53		£27,613	
40	Develop and finalise ITSFB documentation (design elements)			£0	L	15	£7,815			03			£0		£0	2	£1,042	17		£8,857	
41 42	Develop and finalise ITSFB documentation (Capex) Manage and administer any clarifications	L	5	£0 £2,605	S	2	£0 £1,042	L S	5	£2,475 £2,475			£0	1	£0 £521	1	£0 £521	5 14		£2,475 £7,164	
	Evaluation of Final Tender Submissions in	-	+	-	-			-		-	-			-	-						
	conjunction with client and advisory team, administration of clarifications, followed by																		313		
	NHSL approvals	-		-		-				-				-						ļ	
		1																			

Ref	Description	Da	vis Lar	ngdon	Mott Macdonald			Th	omson	Gray	Turn	er & To	wnsend			M		Totals			Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	ммғм	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
44	Evaluation of all D&C and FM elements of Final Tenders, in particular, compliance with bid documents and legislative requirements (Clinical Functionality will be reviewed by NHSL and does not form part of the scope at any time – (however it is likely that that they will seek our guidance since this will all be part of the final evaluation)	S	0	£0	L	90	£46,890			£0			£0	10	£5,210	10	£5,210	110		£57,310	
45	Also to include evaluation of Bidders Construction proposal since these will be linked with the compliance with the Development Control Plan.			£0	L	11	£5,731			£0			£0		£0		£0	11		£5,731	
46	Evaluation of all commercial aspects (Capex) of Final Tenders			£0	s	4	£2,084	L	20	£9,900			£0		£0		£0	24		£11,984	
47	Evaluation of all commercial aspects (FM only) of Final Tenders	L	0	£0	S	4	£2,084	R	1	£495			£0	13	£6,773	10	£5,210	28		£14,562	
48	Evaluation of all commercial aspects (Lifecycle only) of Final Tenders	R	0	£0	S	4	£2,084	L	5	£2,475			£0		£0		£0	9		£4,559	
49	Evaluation of other technical aspects of Final Tenders	L	0	£0	S	2	£1,042			£0			£0	0	£0		£0	2		£1,042	
50	Any variant alternative proposals that may be submitted by the Tenderers, where required liaising with all other advisors to compile an evaluation report, are excluded from this Scope.			£0			£0			£0			£0		£0		£0	0		£0	
51	Manage and administer any clarifications	L	10	£5,210	S	0	£0	S	6	£2,970			£0	2	£1,042	3	£1,563	21		£10,785	
52	Prepare debriefing notes, and attend debrief meetings, for unsuccessful bidders	L	18	£9,378			£0			£0			£0		£0		£0	18		£9,378	
53	Prepare and submit recommendation report to NHSL	L	9	£4,689	S	8	£4,168	s	5	£2,475			£0		£0	2	£1,042	24		£12,374	
	Achieving Financial Close – Coordinating approvals process and managing commercial, legal and financial issues which require to be closed																		623		
54	Participate in final negotiations, along with the NHSL team and Legal and Financial Advisors, to achieve contract award and financial close	L	40	£20,840	s	85	£44,285	S	10	£4,950			£0		£0	25	£13,025	160		£83,100	
55	Assist in the production of a comprehensive and final version of the Contract Documents taking account of the discussions, correspondence and negotiations with the tenderers, preferred bidder and reserve preferred bidder and their respective lenders	L	40	£20,840	s	85	£44,285	s	8	£3,960			£0	40	£20,840	14	£7,294	187		£97,219	
56	Coordinate technical inputs to achieve Financial Close	L	40	£20,840	s	85	£44,285	s	1	£495			£0	25	£13,025		£0	151		£78,645	
57	Provide necessary input related to D&C, FM and Paymech elements of Financial Close including initial RDD process.				L	75	£39,075			£0			£0		£0	50	£26,050	125		£65,125	
				£331,356			£730.963		120	£59,400			£31,680						2418	1,376,908	

Subsonsultant management, administration & risks

£24,852

£4,455

£2,376 £8,362

£ 40,045 £ 1,416,953 £ 1,445,292 £ 75,000 £ 1,370,292

Total Buying Solutions Levys Discount

### Section B

#### CORE TECHNICAL ADVISOR ROLE DURING CONSTRUCTION

Ref	Description	Da	vis La	ngdon	Mot	tt Mac	donald	TH	nomson	Gray	Turn	er & To	wnsend			FM			Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	ммғм	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
58	Delivery of formal Authority Representative role on behalf of NHSL	L	515	£268,315			£0	- 10		£0			£0		£0		£0	515		£268,315	
59	Attendance and reporting at Project Board meetings as required	L	59	£30,739	s	11	£5,731	S	36	£17,620			£0		£0		£0	106		£54,290	
60	Ongoing management of Independent Certifier in conjunction with SPV	L	40	£20,840			£0			£0			£0		£0		£0	40		£20,840	
61	Monitor that Project Co provides CDM Coordinator with necessary record drawings, operating manuals for inclusion in Health & Safety file			£0	L	0	£0			£0			£0		£0		£0	0		£0	
62	Maintain ongoing relationship and dialogue with SPV partner	L	119	£61,999			£0			£00			£0		£0		£0	119		£61,999	
63	Management of Reviewable Design Data (RDD) process on behalf of Authority including progress reporting, attendance at workshops, administration and stakeholder input			£0	L	231	£120,351			£0			£0		£0		£0	231		£120,351	
64	Management and reporting of Change Control process (Capex)			£0			£0	L	72	£35,640			£0		£0		£0	72		£35,640	
65	Review of FM costs related to Change Control	L	0	£0			£0			£0			£0	40	£20.840	39	£20,319	79		£41,159	
66	Review of Lifecycle costs related to Change Control			£0			£0	L	72	£35,640			£0		£0		£0	72		£35,640	
67	Any required assessment and negotiation of any claims from SPV are excluded from this Scope.			£0			£0			£0			£0		£0		£0	0		60	
68	Liaison with SPV and Independent Certifier as required to achieve Handover	L	15	£7,815			£0			£0			603		£0		£0	15		£7,815	
69	Coordination and reporting of snagging and defects matters	L	44	£22,924			£0			£0			60		£0		£0	44		£22,924	
70	All activities related to commissioning and mobilisation by NHSL are excluded.																				
			792	£412,632		242	£126,082		180	£89,100		0	£0	40	£20,840	39	£20,319		0	£668,973	

### Section C

### REFERENCE DESIGN (PROVISIONAL SUMS)

Ref	Description	Da	avis La	ngdon	Mo	tt Mac	donald	т	homson	Gray	Turn	er & To	wnsend			FM			Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	MMFM	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
		Г																			Provisional Sum Allowance only.
71	Management and Delivery of Reference Design		653	£340,213		284	£147,964		297	£147,015	5	75	£37,125		£0		£0	1,309		£672,317	Allowances based or current HFS allowances for Reference Design
72	Provisional Sum for Design Fees (as advised by NHSL)																			£2,000,000	Neterence Design
	l .		653	£340,213		284	£147,964		297	£147,015		75	£37,125	0	£0	0	£0		0	£2,672,317	

### Section D

### PRESCRIBED ADDITIONALS (PROVISIONAL SUMS)

Ref	Description	Da	vis Lar	ngdon	Мо	tt Macc	lonald	Ti	nomson	Gray	Turn	er & To	wnsend			FM			Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	ммғм	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
73	Provision of Project Management & Programme Co- ordination for Little France site activities interacting with the NPD project																			Included in Total	

Ref	Description	Da	vis Lan	ngdon	Mot	tt Macd	onald	Tì	nomson	Gray	Turne	er & Tov	wnsend			FM		l	Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	ммғм	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
74	Provision of cost advisor services for the Little France site activities interacting with the NPD project.																			Included in Total	
75	General Advisory Team duties interacting with the existing PFI provider (Consort)																			Included in Total	
76	General Advisory Team duties interacting with other stakeholders (Edinburgh University, Bio quarter, charitable bodies)																			Included in Total	
77	General Advisory duties and co-ordination relating to the Clinical Enabling Works in relation to the NPD project.																			Included in Total	
78	General Advisory duties and co-ordination relating to the Non Clinical Enabling Works in relation to the NPD project.																			Included in Total	
					-						-				_	+				£298,675	

## SUBCONSULTANCY AGREEMENT

## MOTT MACDONALD LIMITED = AS CONSULTANT

THIS SUB-CONSULTANCY AGREEMENT made the \_\_\_\_\_\_ day of \_\_\_\_\_ day of \_\_\_\_\_ day of \_\_\_\_\_ between Mott MacDonald Limited of Mott MacDonald House, 8-10 Sydenham Road, Croydon, CR0 2EE, United Kingdom, (company number 1243967) (hereinafter called "the Consultant") of the one part and Davis Langdon LLP of Aurora, 120 Bothwell Street, Glasgow, G2 7JS, United Kingdom (company number OC360911) (hereinafter called "the Sub-consultant") of the other part.

#### WHEREAS

- the Consultant has been appointed by Lothian Health Board (hereinafter called "the Client") to provide certain Services in respect of NPD project for the Royal Hospital for Sick Children / Department of Clinical Neurosciences at the Royal Infirmary of Edinburgh hereinafter referred to as "the Project") and wishes to employ the Sub-consultant to assist the Consultant to provide certain services which form part of the Services to be supplied by the Consultant to the Client (hereinafter together referred to as "the Sub-consultancy Services");
- ii) the Sub-consultant is willing to supply such Sub-consultancy Services and has made a proposal for the same which has been accepted by the Consultant;

#### NOW THIS SUB-CONSULTANCY AGREEMENT WITNESSES AS FOLLOWS:

- In this Sub-consultancy Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions hereinafter referred to.
- The following documents shall be deemed to form and be read and construed as part of this Sub-consultancy Agreement, namely: Schedules 1 to 4 being:
  - 1. The Conditions
  - 2. The Scope of Sub-consultancy Services
  - The Personnel, Equipment, Facilities and Services of Others to be provided by the Consultant
  - 4. Remuneration and Payment
  - Annexure 1. Agreement between the Client and the Consultant
- 3. In consideration of the payments to be made by the Consultant to the Sub-consultant as hereinafter mentioned the Sub-consultant agrees with the Consultant to perform the Sub-consultancy Services in conformity with the provisions of the Sub-consultancy Agreement.
- 4. The Consultant hereby agrees to pay the Sub-consultant in consideration of the performance of the Sub-consultancy Services such amounts as become payable under the provisions of the Sub-consultancy Agreement at the times and in the manner prescribed by the Sub-consultancy Agreement.

IN WITNESS WHEREOF these presents consisting of this together with Schedules 1-4 inclusive and Annexes 1 and 2 are executed as follows:

Signed for and on behalf of the Consultant

By:
Name:
Title:
Date:

Signed for and on behalf of the Sub-consultant

By:
Name:
Title:
Date:

RHSC/DCN TA SubCon Agreement MML : Davis Langdon LLP April 2011

#### **SCHEDULE 1 - THE CONDITIONS**

#### 1.1 DEFINITIONS AND INTERPRETATION

#### 1.1.1 **Definitions**

In this Sub-consultancy Agreement (as hereinafter defined) all words and expressions have the same meaning as in the Agreement (as hereinafter defined) unless otherwise provided or where the context otherwise requires.

- "Client" means Lothian Health Board by whom the Consultant has been appointed to provide Services in connection with the Project.
- ii) "Consultant" means Mott MacDonald Limited, its legal successors and permitted assignees.
- iii) "Sub-consultant" means Davis Langdon LLP its legal successors and permitted assignees.
- iv) "Project" means NPD project for the Royal Hospital for Sick Children / Department of Clinical Neurosciences at the Royal Infirmary of Edinburgh
- v) "Agreement" means the agreement dated 22 March 2011 under Buying Solutions Order Number NM66866 between the Client and the Consultant for the provision of defined consultancy services in respect of the Project.
- vi) "Sub-consultancy Agreement" means the agreement between the Consultant and the Sub-consultant and comprises the following Schedules, numbered 1 to 4:
  - 1. The Conditions
  - 2. Scope of Sub-consultancy Services
  - 3. Personnel, Equipment, Facilities and Services of Others to be provided by the Consultant (if any)
  - 4. Remuneration and Payment

Annexure 1: The Agreement between Client and Consultant

vii) "Sub-consultancy Services" means the services to be performed by the Sub-consultant in accordance with the Sub-consultancy Agreement

#### 1.1.2 Interpretation

- i) The headings in the Sub-consultancy Agreement shall not be used in its interpretation.
- ii) The singular includes the plural, the masculine includes the feminine, and vice-versa where the context requires.

#### 1.2 OBLIGATIONS OF THE SUB-CONSULTANT

#### 1.2.1 Scope of Sub-Consultancy Services

The Sub-consultant shall perform Sub-consultancy Services relating to the Project. The Scope of the Sub-consultancy Services is stated in Schedule 2 and includes all work incidental thereto and all work that may be reasonably implied therefrom as being necessary to complete the Sub-consultancy Services.

#### 1.2.2 Duty of Care

The Sub-consultant shall perform the Sub-consultancy Services using the reasonable degree of skill care diligence and foresight to be expected from a consultant experienced in the provision of services for

projects of similar size and complexity. The Sub-consultant shall comply with all standards legislation practices and the like applicable or in the reasonable expectation of the Sub-consultant likely to be applicable to the Sub-consultancy Services and the Project. The Sub-consultant shall ensure that it has all the information necessary to properly perform the Sub-consultancy Services in accordance with this Sub-consultancy Agreement. If the Sub-consultant requires any additional information or requires any clarification of information provided to it by the Consultant then the Sub-consultant shall request the same in writing to the Consultant.

#### 1.2.3 Performance of the Sub-consultancy Services

- i) The Sub-consultant shall be deemed to have full knowledge of the provisions of the Agreement, of which the conditions are attached as Annexure 1 hereto (other than the details of the Consultant's rates and prices), and the Consultant shall, if so requested by the Sub-consultant, provide the Sub-consultant with a true copy of the Agreement (less such details) if and to the extent that it is not incorporated herein by way of Annexures.
- ii) The Sub-consultant shall so perform his obligations under the Sub-consultancy Agreement such that no act or omission of his shall constitute, cause or contribute to any breach of the Agreement by the Consultant of any of his obligations under the Agreement.
- iii) The Sub-consultant shall observe all the conditions and assume and perform all the obligations and liabilities of the Consultant under the Agreement in relation to the Sub-consultancy Services.
- iv) The Sub-consultant shall be liable to and shall re-perform the Sub-consultancy Services until such time as the Sub-consultancy Services meet the requirements of the Agreement in so far as such relates to the Sub-consultancy Services.
- v) The Sub-consultant acknowledges that the Consultant has and will rely upon the skill and judgement of the Sub-consultant in connection with all matters for which the Sub-consultant is responsible under the Sub-consultancy Agreement.
- vi) The Sub-consultant shall owe the Consultant no greater duty, obligation or liability under this Sub-consultancy Agreement than the Consultant owes to the Client under the Agreement in respect of the Services and any exclusion, limitation or defence available to the Consultant under the Agreement may be relied upon by the Sub-consultant against the Consultant.

#### 1.3 OBLIGATIONS OF THE CONSULTANT

#### 1.3.1 Scope of Obligations

- i) Except where otherwise required by the Sub-consultancy Agreement, the Consultant shall in relation to the Sub-consultancy Services assume and perform hereunder all the obligations of the Client under the Agreement. Notwithstanding any approval or consent by the Consultant in respect of the Sub-consultancy Services, the Sub-consultant shall not be relieved thereby of any obligation or liability under the Sub-consultancy Agreement.
- ii) Where the obligations of the Consultant under the Sub-consultancy Agreement are dependent on the acts or omissions of the Client under the Agreement
  - a) the Consultant shall be relieved of such obligations to the extent that the Client is in default under the Agreement;
  - b) in the event of such default of the Client and after notice from the Sub-consultant that he is being adversely affected, the Consultant shall after consultation with the Sub-consultant diligently pursue those remedies to which he is entitled under the Agreement, and shall allow to the Sub-consultant that component of the remedies received to which he would otherwise have been entitled in respect of the Sub-consultancy Services.

#### 1.3.2 Details of Consultant's Supplies to the Sub-consultant

- The Consultant shall make available to the Sub-consultant for the purpose of the Sub-consultancy Services the equipment, facilities, personnel and services of others as described in Schedule 3 (if any). All of these shall be free of cost to the Sub-consultant except where stated in Schedule 3.
- ii) Notwithstanding the provisions of this clause it shall remain the absolute obligation of the Sub-consult to ensure that the Sub-consultant has all the information of whatever degree it requires to perform the Sub-consultancy Services.

#### 1.4 LIABILITY AND INDEMNITY

#### 1.4.1 Liability and Indemnity

- i) The Sub-consultant shall at all times indemnify the Consultant against all loss and damage incurred by the Consultant and against all liabilities to other persons (including the Client and the employees and agents of the Client, Consultant and Sub-consultant) for loss or damage which may arise out of or in consequence of the negligent acts or omissions of the Sub-consultant in the performance of his obligations under the Sub-consultancy Agreement.
- ii) The Sub-consultant shall indemnify the Consultant against any costs and charges incurred by the Consultant in respect of engineering and management of the re-performance of the Subconsultancy Services due to breach of the Sub-consultant of its obligations under this Subconsultancy Agreement.
- iii) The Sub-consultant acknowledges that any breach of this Sub-consultancy Agreement may cause the Consultant to be in breach of other related agreements. The Sub-consultant accepts that any damages that the Consultant may become liable for under other related agreements as a result of the Sub-consultant's breach of this Sub-consultancy Agreement are in the contemplation of the Sub-consultant. This clause shall only operate to the extent that the Sub-consultant has been given access to any related agreements.
- iv) Each party shall be solely responsible for compliance with its obligations under this Subconsultancy Agreement by its former, present or future individual employees, consultants, Directors, Members or other officers and no legal action or proceedings may be brought against any such individual personally for any loss resulting from acts or omissions in the performance of the Sub-consultancy Services or any breach of this Sub-consultancy Agreement.

## 1.5 COMMENCEMENT, COMPLETION, VARIATION OF SERVICES, SUSPENSION AND TERMINATION

#### 1.5.1 Sub-consultancy Agreement Effective Date

The Sub-consultancy Agreement shall be effective from the date of commencement of the Sub-consultancy Services by the Sub-consultant notwithstanding that such services may have commenced prior to the date of this Sub-consultancy Agreement.

#### 1.5.2 Commencement and Completion

If so stated the Sub-consultancy Services shall be commenced and completed at the times or within the periods stated in Schedule 2 subject to extensions in accordance with the Sub-consultancy Agreement. The Sub-consultant shall proceed with the performance of the Sub-consultancy Services regularly and diligently and shall use reasonable endeavours to comply with any programme or schedule of deliverables,

#### 1.5.3 Variations

The Sub-consultancy Services may be varied by the Consultant by way of addition omission substitution or

other amendment as the Consultant may instruct from time to time in writing to the Sub-consultant. The Sub-consultant shall not make any change to the Sub-consultancy Services without written instruction from the Consultant. Upon receipt of any proposal or written instruction to vary the Sub-consultancy Services the Sub-consultant shall forthwith notify the Consultant of the likely impact (if any) of the variation on the Sub-consultancy Services. Unless stipulated otherwise in Schedule 4 payment for the Sub-consultancy Services shall be adjusted as is reasonable in the circumstances to reflect the value of the variation to the said services.

#### 1.5.4 Delays

If the Sub-consultancy Services are impeded or delayed by the Consultant so as to increase the amount or duration of the Sub-consultancy Services

- i) the Sub-consultant shall forthwith inform the Consultant of the circumstances and probable effects together with the Sub-consultant's full proposals for mitigating the delays so caused and the Sub-consultant shall accept the Consultant's instructions in respect of such proposals or amendment thereto
- ii) subject to (i) above the time for completion of the Sub-consultancy Services shall be increased accordingly

provided that if such delay arises from delay by the Client the amount reimbursed to the Sub-consultant for such additional Sub-consultancy Services and the extension of time for their completion shall be proportionate to any benefit derived by the Consultant under the Agreement in respect of the same matters. The Sub-consultant shall only be entitled to relief under this Clause if the Sub-consultant has given full details to the Consultant of the circumstances and probable effects as soon as reasonably practicable after the occurrence thereof.

#### 1.5.5 Suspension or Termination

#### i) By Notice of the Consultant

- a) The Consultant can by 7 days notice to the Sub-consultant suspend or abandon any of the Sub-consultancy Services or terminate the Sub-consultancy Agreement.
- b) Upon receipt of any notice to terminate the Sub-consultancy Agreement or to suspend or abandon any of the Sub-consultancy Services, the Sub-consultant shall take immediate steps to minimise expenditure thereon. The Consultant may by written notice require the Sub-consultant to recommence any of the Sub-consultancy Services previously suspended under this clause.

#### ii) By Notice of the Sub-consultant

a) If the Consultant commits a material breach of the Sub-consultancy Agreement and, despite notice of such breach in writing by the Sub-consultant to the Consultant, the Consultant fails to remedy such breach within 28 days then the Sub-consultant may terminate the Sub-consultancy Agreement by a further 28 days notice.

#### 1.5.6 Rights and Liabilities on Termination

Termination of the Sub-consultancy Agreement shall not prejudice or affect the accrued rights or claims or liabilities of the Parties.

#### 1.6 **PAYMENT**

#### 1.6.1 Payment to the Sub-consultant

- Subject to Clause 1.6.1(v) the Consultant shall pay the Sub-consultant for the proper performance of the Sub-consultancy Services in accordance with the conditions, methods and currencies stipulated in Schedule 4. Subject to any provision to the contrary in Schedule 4 the Sub-consultant may render an invoice for services properly performed monthly in arrears. No payment will be made for any variation or addition to the Sub-consultancy Services unless written agreement to perform such services is obtained by the Sub-consultant in accordance with Clause 1.5.3.
- ii) Payment of an agreed invoice in compliance with Clause 1.6.1 (i) shall become due 7 days after receipt of such invoice by the Consultant. The final date for payment shall be 28 days after payment becomes due.

Not later than 5 days after the date on which a payment becomes due under the Subconsultancy Agreement, or would have become due if-

- (a) the Sub-consultant had carried out his obligations under the Sub-consultancy Agreement, and
- (b) no set off or abatement was permitted by reference to any sum claimed to be due under the Sub-consultancy Agreement or any other agreement

the Consultant shall issue a notice specifying the amount to be paid and the basis on which such payment was calculated.

- iii) The Consultant shall not withhold payment after the final date for payment unless an effective notice of intention to withhold payment has been issued to the Sub-consultant at least one day before the final date for payment. To be effective, a notice must specify
  - (a) the amount proposed to be withheld and the ground for withholding payment
  - (b) if there is more than one ground, each ground and the amount attributable to it.
- iv) Where the Consultant fails to pay in full the amount due for the proper performance of the Sub-consultancy Services by the final date for payment and no effective notice to withhold payment has been given, then the Sub-consultant may suspend performance of the Sub-consultancy Services. The Sub-consultant may only exercise this right after giving the Consultant 14 days notice of the Sub-consultant's intention to suspend performance. Such right shall cease when the Consultant makes payment of the sum due.
- v) Without prejudice to the provisions of this Clause 1.6 where the Sub-consultancy Services in respect of which payment is claimed are part of the Services for which the Consultant is to receive payments from the Client under the Agreement, and provided that the Client has complied with clause 37 of the Agreement, the Consultant reserves the right to pay the Sub-consultant, only after confirmation from the Client that the Client is satisfied in all respects with that element of the Services provided by the Sub-consultant. The Consultant shall endeavour to obtain such assurance from the Client without delay. Without prejudice to this requirement such confirmation from the Client and/or payment under this Sub-consultancy Agreement shall not relieve the Sub-consultant of any of its obligations and liabilities under the Sub-consultancy Agreement nor prejudice the right of the Consultant to reject any service which does not comply with this Sub-consultancy Agreement.

#### 1.7 INSURANCE REQUIREMENTS

#### 1.7.1 Sub-consultants Insurance

Without limiting any of the Sub-consultants obligations or liabilities under this Sub-consultancy Agreement the Sub-consultant shall take out and maintain professional indemnity insurance cover issued

by a reputable insurer acceptable to the Consultant in respect of the Sub-consultants liabilities pursuant to this Sub-consultancy Agreement and at law. The minimum amount of professional indemnity insurance cover required shall be £10m in respect of each and every claim unlimited in the aggregate unless otherwise stated in Schedule 4.

The Sub-consultant shall maintain the insurance cover required under this clause from the date of this Sub-consultancy Agreement and for a minimum period of 12 years following the satisfactory completion of the Sub-consultancy Services. Upon request from the Consultant the Sub-consultant shall furnish suitable evidence as is reasonably necessary to demonstrate that such insurance is in place.

#### 1.8 CLAIMS AND DISAGREEMENTS

#### 1.8.1 **Claims**

Without prejudice to any other term of the Sub-consultancy Agreement:

- i) Any claim by either party for compensation for loss or damage arising out of breach or termination of the Sub-consultancy Agreement shall be promptly advised to the other party by notice in writing and shall be agreed between the parties or, failing agreement, shall be referred to dispute resolution in accordance with clause 1.8.2.
- ii) Whenever the Consultant is required by the terms of the Agreement to give any notice or information to the Client, the Sub-consultant shall, in relation to the Sub-consultancy Services, give similar notice or information and in such time as will enable the Consultant to comply punctually with the terms of the Agreement.

#### 1.8.2 Disagreement or Dispute

Any disagreement or dispute arising out of or relating to this Sub-consultancy Agreement or the breach, termination or invalidity thereof shall be settled as follows.

- (i) Mutual agreement: The parties shall attempt in good faith to resolve all disagreements or disputes between themselves by mutual agreement.
- (ii) **Mediation:** If the parties fail to resolve the disagreement or dispute within 14 days (or such other time as may be agreed) of the notice given under Clause 1.8.1(i) then the disagreement or dispute may be referred to mediation in accordance with the Centre for Effective Dispute Resolution (CEDR) Model Mediation Procedure.
- (iii) Adjudication: A dispute shall only be referred to adjudication if the Housing Grants Construction and Regeneration Act 1996 applies to this Sub-consultancy Agreement. In such a case any dispute may be referred to adjudication in accordance with the Scheme for Construction Contracts. The nominating body shall be the Chartered Institute of Arbitrators.
- (iv) Arbitration: Subject to Clause 1.8.2(v) which shall take precedence over this Clause 1.8.2(iv) if the parties are not able to resolve the disagreement or dispute or if either party is dissatisfied with the adjudicators decision (as the case may be) then the disagreement or dispute shall be referred for final settlement to the arbitration of a person agreed between the parties or failing such agreement appointed upon the application of either party by the President of the Chartered Institute of Arbitrators. The arbitration shall be carried out in accordance with the the Arbitration (Scotland) Act 2010. The law governing the arbitration shall be that of Scots Law and the forum of the arbitration shall, unless otherwise agreed in writing, be Edinburgh.
- (v) **Joinder:** If any disagreement or dispute arises under the Agreement (the "Main Dispute") and the Consultant is of the opinion that it touches or concerns a dispute which has or is likely to arise under the Sub-consultancy Agreement (the "Connected Dispute") the

Consultant can by notice to the Sub-consultant require that the Connected Dispute be dealt with jointly with the Main Dispute under the Agreement in accordance with the provisions for dispute resolution therein in which case the arbitration provisions as set out at Clause 1.8.2(iv) shall not apply.

#### 1.9 GENERAL PROVISIONS

#### 1.9.1 Languages and Law

The language of the Sub-consultancy Agreement shall be English.

The law to which the Sub-consultancy Agreement is subject shall Scots Law.

#### 1.9.2 Assignment and Sub-contracts

- i) The Sub-consultant shall not without the written consent of the Consultant assign any benefits under the Sub-consultancy Agreement other than money.
- The Sub-consultant shall not sub-contract all or part of the Sub-consultancy Services without the written consent of the Consultant.
- iii) The Sub-consultant shall not without the written consent of the Consultant initiate, vary or terminate any sub-contract for performance of all or part of the Sub-consultancy Services.

Provided that where the Client exercises rights of refusal to consent under the Agreement in respect of these matters the Consultant can exercise his rights under the Sub-consultancy Agreement in the same way.

#### 1.9.3 Notices

Notices under the Sub-consultancy Agreement shall be in writing and will take effect from receipt at the principal place of business of the party to whom the notice is addressed or at such other address as shall be advised by notice from time to time. Delivery can be by hand, or by facsimile message against a written confirmation of receipt, or by registered letter, or by telex subsequently confirmed by letter.

#### 1.9.4 Administration

Unless otherwise agreed in writing, the Sub-consultant shall not act on any instruction received directly from the Client without the prior approval of the Consultant in each case.

#### 1.9.5 Waiver

No delay or neglect or forbearance on the part of the Consultant in applying or enforcing any term or condition of this Sub-consultancy Agreement shall be or be deemed to be a waiver of any of the Consultant's rights under the Sub-consultancy Agreement unless expressly stated in writing by the Consultant to be a waiver.

#### 1.9.6 Whole Agreement

This Sub-consultancy Agreement (together with the Schedules and any documents referred to herein) shall constitute the whole agreement between the parties and shall supersede any previous agreements or arrangements in respect of the Sub-consultancy Services.

#### 1.9.7 Third Party Rights

Notwithstanding any provision to the contrary in this Sub-consultancy Agreement, no person or entity shall have any rights in relation to this Sub-consultancy Agreement, whether as third parties under Scots law doctrine of *jus quaesitum tertio* or otherwise, save the parties to this Sub-consultancy Agreement.

#### 1.9.8 Confidentiality

The Sub-consultant shall keep all matters pertaining to this Sub-consultancy Agreement and the Project confidential at all times and for a period of 6 years after completion of the Sub-consultancy Services provided that the Sub-consultant may disclose information in relation to the Sub-consultancy Agreement and the Project to others to the extent that such disclosure is notified to the Consultant in advance and approval in writing obtained from the Consultant and provided that such disclosure is necessary for the proper execution of the Sub-consultancy Services.

#### 1.9.9 Conflict of Interest

- The Sub-consultant warrants that at the time of entering into this Sub-consultancy Agreement the Sub-consultant is not aware of any present or future matter that may give rise to any real or perceived conflict of interest with this Sub-consultancy Agreement and/or the Project.
- ii) The Sub-consultant shall use its reasonable endeavours to ensure that no conflicts of interest arise in connection with this Sub-consultancy Agreement and/or the Project and shall make available to Consultant any information of which it is aware concerning any matter or assignment undertaken by any person connected with the Sub-consultant that may give rise to a real or perceived conflict of interest with this Sub-consultancy Agreement and/or the Project
- iii) The Consultant shall be entitled to determine in its absolute discretion whether a conflict of interest real or perceived has or is likely to arise in connection with the Sub-consultant's appointment under this Sub-consultancy Agreement. Accordingly without prejudice to any other right or remedy available to the Consultant, the Consultant may terminate the Sub-consultancy Agreement in accordance with Clause 1.5.5(i)(a) forthwith and without a period of notice.

#### 1.9.10 Intellectual Property Rights

The legal and beneficial ownership of all Intellectual Property prepared or developed by or on behalf of the Sub-consultant in connection with the Project shall remain vested in the Sub-consultant. The Sub-consultant hereby grants to the Consultant an irrevocable, royalty-free, non-exclusive licence to use all rights, titles and interest in any such Intellectual Property in connection with the Project, provided that the Sub-consultant shall have no liability for any use of the Intellectual Property other than for the purposes for which it was originally intended. The Sub-consultant agrees that the Consultant may issue a sub licence to the Client upon similar terms. Where under the Agreement the Client requires all Intellectual Property to be vested in the Client then the Sub-consultant agrees to comply with such terms in the Agreement as if such terms were incorporated expressly herein subject to the necessary changes being made to give proper effect to such terms.

#### 1.9.11 Corruption and Fraud

In the performance of his obligations under or in connection with this Sub-consultancy Agreement the Sub-consultant, his agents and employees shall comply with all applicable laws rules regulations including the Prevention of Corruption Acts 1889 to 1916 and/or the Bribery Act 2010 and where appropriate the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions.

The Sub-consultant

- a) warrants and represents that it has not carried out; and
- b) undertakes that it will not carry out;

directly or indirectly through any other person or entity any unlawful act including without limitation the offer or payment of a bribe to a public official or any other person in connection with any matter connected with this Sub-consultancy Agreement or the Project.

Further the Sub-consultant shall notify the Consultant immediately in writing with full particulars in the event that the Sub-consultant receives a request from any public official or any other person of influence requesting illicit payments.

If the Sub-consultant is in breach of any term of this clause then the Consultant shall be entitled to terminate the Sub-consultancy Agreement at any time on written notice with immediate effect and without compensation. Upon such termination, all rights of the Sub-consultant to payment hereunder (whether or not such rights have already accrued) shall be extinguished without prejudice to the Consultant's right to claim compensation from the Sub-consultant.

### SCHEDULE 2 - SCOPE OF SERVICES

The Scope of Services is as outlined in Technical Advisor Scope v 12 at Annexure 1 subject to further changes and programme as agreed between the Client, the Consultant and the Sub-consultant.

Royal Hospital for Sick Children & Department of Clinical Neurosciences Technical Advisor Scope 17-Mar-11

 Blended Daily Rates

 DL
 £521

 MM
 £521

 TG
 £495

 TT
 £495

#### Section A

## CORE TECHNICAL ADVISOR ROLE UP TO FINANCIAL CLOSE

Ref	Description	D	avis L	angdon	M	ott Ma	cdonald	T	Thomso	n Grav	To	rner #	Townsen	ď		FM		T	Tetal		
		Role	Man		Role	Man	Ess.	Role	Man	Fee	Roi	Ma Ma	n Fee	DLF	FM Fee	MMF	M Fee	Task Total Mar	Totals Section Total	T	Notes
	Management and Coordination	1	-		=	Day	+	=	Days		-	Day	/5			-	ree	Days	Man Days 234	Total Fee	
1	Act as Lead Technical Advisor and point of contact for NHSL Client	L	0	£0	1	234	£121,91	4		03	+	+-	£0	+	60	+	60	234		£121,914	
	Business Cases	F		-	-		=	1	-		1			+				204		2121,914	
2	Monitor, direct and report to NHS Health Board		36	£18,756	5 S	10	£5,210	S	B	£3,960	1			$\pm$					166		
3	Coordination of all FBC information required from advisory team by NHSL Business Case Manager	L	42	£21,882	_	1	£0	S	3	£1,485		+	£0	+	£0	+-	£0	45		£27,926 £23,367	
4	Manage and coordinate the review of any design proposals against the scheme brief				L	0	£0			£0	1		£0	1	£0	1	£0	0		£0	
	Assist the Financial Advisor in the Development, Ownership and maintenance of suitably detailed Public Sector Comparator/Conventional										T										
5	Procurement Assessment Model including regular provision (at least quarterly) of Value for Money	R	4	£2,084	s	8	£4,168	L	10	£4,950	1		£0	1	£521	1	£521	24		£12,244	
	assessments Assist in the preparation of the commercial element	_			-			_			_	-		┸							
6	of the Full Business Case. This shall include full monitoring of costs, excluding whole life costs, on						£0		5	£2,475	1		£0	1	03		£0	5			
	the basis of the bids and any refinements which develop								3.54	,					1.0		1.0			£2,475	
	Contribution to PSC as required (FM only)  Contribution to PSC as required (Lifecycle only)	S	0	£0	S	0	£0	S	3	£990 £1,485		-	£0	3		4	£2,084 £2,084	9		£4,637 £5,132	
9	Management of Key Stage Reviews 1 to 4 All items above are FBC only. No input to OBC	L	9	£4,689	S	.5	£2,605	S	4	£1,980			£0	F	£0	1	£521	19		£9,795	
	required by NHSL													$\vdash$	-	-					
	Procurement of NPD Co including Competitive Dialogue																		521		
	Prepare Invitation to Partake in Dialogue (ITPD) including Output Specification, Payment										$\vdash$	-	-	-	-					107-10-10-10-10-10-10-10-10-10-10-10-10-10-	
10	Mechanism etc, for Procurement process. All prepared in association with cilent legal and	L	36	£18,756	s	214	£111,494			£0			£0	24	£12,504	45	£23,445	319		£166,199	
	financial advisors.  Ownership of Output Specification coordinating	_		-							_			_	-						
12	inputs from team Ownership and coordination of Payment	R	0	60	L	0	£0	_		£0	-	-	£0	24	£12,504	0	£0	24		£12,504	
13	Mechanism Prepare Reference Design documentation, as	9	0	03 03	L	10	£10,420 £5,210	-	-	60	-	-	03	10	£5,210	0	03	30		£15,630	
14	appropriate, for inclusion in ITPD Carry out any soft market testing considered	L	13	£6,773	S	2	£5,210 £1,042			£0	-		03	-	03	0	£0	10		£5,210	
	necessary by the client Contribution of all necessary D& C and FM-related	-	,5							£0	-	_	£0	-	£0	1	£521	16		£8,336	
	input to the Payment Mechanism and Output Specification in conjunction with NHSL Check Reference Design for compliance with all			£0	L	0	£0			£0			EO		03		£0	0		£0	
16	appropriate NHSL and legislative guidelines and requirements (list as pre-agreed with NHSL) and			£0	L	5	£2,605			£0			£Ο		£0	0	60	5		£2,605	
	identify any derogations Develop approved and final Room Data Sheets	-							-			_							-		
17	appropriate for inclusion in bid documents in conjunction with NHSL			£0	L	4	£2,084			£0			£0		03	1	£521	5		£2,605	
10	Finalise Accommodation Schedule and Adjacency Matrix in conjunction with NHSL			£0	L	1	£521			£0			£0		£0		60	1		£521	
19 0	reparation of Equipment Responsibility Matrix linked to outputs of the reference design) Receive H&S information relating to the proposed	_	-	EO	L	26	£13,546			60			£0		£0		£0	26		£13,546	
20   5	site & ERI Interface from NHSL and incorporate into			£0			£0			60	L	64	£31,680		£0		60	64		£31,680	
21	Advise NHSL on the correct level and balance of the Availability and Performance Standards,	s	0	£0		0	£0														
1	Handback Provisions and other components within the payment mechanism				_					£0			£0	0	£0	0	03	0		03	
7	Technical Input to Project Agreement The Legal Advisor shall have responsibility for	S	0	EO		18	£9,378			EO			03		03	3	£1,563	21		£10,941	
	ensuring consistency between the ITPD and the contract documents.  If items above assume contract to be based on	-	_			_		_										0		£0	
	Standard PPP Form Contract	-	-			-	-	-		-	-					_					
	repare and Issue Project Information Notice PIN) and Bidders Day																$\neg$		33		
		L	4	£2,084	S	0	£0			03	_		£0		£0		£0	4		£2,084	
P P	repare PIN in conjunction with NHSL and legal dvisors	L		£4,689	S	1	£521			03			£0		£0		EO	10		£5,210	
A A	rrange and attend Bidders' Day in conjunction with	L	11	£5,731	S	5	£2,605	s	2	£990			03		£0	1	£521	19		£9,847	
	re-Qualification Process	-			-	-	=	-				-				-			174		
- 0	resource and leavue POO mack in conjugation with	$\exists$	25	242.005		,	£1,042	_	4	E4 000	-	_		4	50.004		-	25		£18,131	
N N	HSL and legal and financial advisors	L	9	£4,689	R	4		S	2	£1,980 £990			£0	9	£2,084 £4,689	$\pm$	£0 03	35 24		£12,452	
				£3,647	S	37 1	£19,277 £0	S	6	£2,970 £0			£0 20	4	£2,084 £0	4	£2,084 £0	91 7		£47,255 £3,647	
00 re		L	14	£7,294			20	s	3	£1,485			£0		£0		£0	17		£8,779	
	debriefs as required																			-	
sh	dminister Competitive Dialogue Process with hortlisted Bidders (based on 3 shortlisted																		499		
E	idders) acilitate review of Competitive Dialogue Strategy		#		=	#		#													
an	nd schedule repare Competitive Dialogue Strategy	L	8 4	£4,168	S	1	£521	-		£0	_	-	£0	4	£2,084	_	£0	13		£6,773	
2 les	gal and financial advisors) detailing programme, ructure, agendas, interim submissions etc	L	40 £	20,840	s	18	£9,378			£0			£0		£0	2	£1,042	60		£31,260	
3 At	tend formal CD meetings (include for 3 formal and 3 'informal' with each of the Bidders.	L	18 £	£9,378	s	36 E	18,756	s	2	£990		4	£0	9	£4,689	9	£4,689	74		£38,502	
4 Re	esponsibility for structure and review of all D&C ad FM elements of CD process	s	17 £	8,857	L	76 £	39,596			£0			£0	7	£3,647	10	£5,210	110		£57,310	
5 sta	pordinate and document all necessary akeholder input to D&C and FM related elements			£0	L	52 £	27,092			£0			£0		60	7	£3,647	59		£30,739	
All	CD process.  Iowance for dealing with Clarifications during CD pocess.	L ;	30 £	15,630	s	70 £	36,470	s		£0			£0	5	£2,605	5	£2,605	110		£57,310	
Co	pordinate evaluation of and feedback to interim	L :	36 £	18,756		30 £	15,630			£0			£0	7	£3,647		EO	73		£38,033	
Pri	ovide feedback on all D&C and FM -related ements of interim submissions				s	0	£0						£0		£0		£0	0		£0	
	***************************************					-						$\exists$									
Po	eparation of final submissions by bidders	$\dashv$	-	-							$\exists$	_		$\dashv$		$\pm$			89	-	
De	evelop and finalise ITSFB documentation evelop and finalise ITSFB documentation (design	. 3	30 E	-			7,294	-		03	-	-	£0	9	£4,689	2	£0 24.042	53	Part and Electric	£27,613 £8,857	
ele	ements) evelop and finalise ITSFB documentation (Capex)	_	_	03	L	15 £	£0	L	5 £	£0 2,475		_	£0	_	£0		£0	5		£2,475	
		-	5 £		S	2 £		S		2,475	-	-	03	1	£521	1	£521	14		£7,164	
	aluation of Final Tender Submissions in njunction with client and advisory team,																		313		
	ministration of clarifications, followed by ISL approvals																				
NH	CC TO TOTAL																				

Ref	Description	Da	avis La	angdon	Mo	tt Mac	donald	TI	homsoi	Gray	Turn	er & To	wnsend	T		FM			Tatala		
		Role	Man Days		Role	Man Days	Fee	Role	Man	Fee	Role	Man	Fee	DLFM		1		Task Total Man	Totals Section Total		Note
44	Evaluation of all D&C and FM elements of Final Tenders, in particular, compliance with bid documents and legislative requirements (Clinical					20,2			Days			Days	166	DLFM	Fee	MMFM	Fee	Days	Man Days	Total Fee	
44	not form part of the scope at any time — (however it is likely that that they will seek our guldance since this will all be part of the final gualantee).	S	0	£0	L	90	£46,890			£0			£0	10	£5,210	10	£5,210	110		£57,310	
45	Also to include evaluation of Bidders Construction proposal since these will be linked with the compliance with the Development Control Plan.			£0	L	11	£5,731			£0			£0		£0						
46	Evaluation of all commercial aspects (Capex) of Final Tenders			£0	s	4	£2,084		20	£9,900							£0	11		£5,731	
47	Evaluation of all commercial aspects (FM only) of Final Tenders	L	0	£0	s	4	£2,084	R	1	£9,900		-	£0		£0		£0	24		£11,984	
48	Evaluation of all commercial aspects (Lifecycle only) of Final Tenders	R	0	£0	s	4	£2,084		5	£2,475		-	£0	13	£6,773	10	£5,210	28		£14,562	
49	Evaluation of other technical aspects of Final Tenders	L	0	£0	5	2	£1,042	-		£0	-		£0		£0		£O	9		£4,559	
50	Any variant alternative proposals that may be submitted by the Tenderers, where required liaising with all other advisors to compile an evaluation report, are excluded from this Scope.			£0			EO			£0			£0	0	£0		£0	0		£1,042	
51	Manage and administer any clarifications	L	10	£5,210	s	0	£0	_											1	03	
52	Prepare debriefing notes, and attend debrief meetings, for unsuccessful bidders	L	18	£9,378	-	-	£0	S	6	£2,970	-	-	03	2	£1,042	3	£1,563	21		£10,785	
3	Prepare and submit recommendation report to NHS:	L	9	£4,689	s	8	£4,168	s	5	03	-	-	£0	_	£0		£0	18		£9,378	
		-	-		-	-	24,100	-	-	£2,475	-		£0		£0	2	£1,042	24		£12,374	
	Achieving Financial Close – Coordinating approvals process and managing commercial, legal and financial issues which require to be closed																		623		
4	Participate in final negotiations, along with the NHSL team and Legal and Financial Advisors, to achieve contract award and financial close	L	40	£20,840	s	85	£44,285	s	10	£4,950		+	£0		£0	25	£13,025	160		502.400	
5	Assist in the production of a comprehensive and final version of the Contract Documents taking account of the discussions, correspondence and negotiations with the tenderers, preferred bidder and reserve preferred bidder and their respective lenders	L	40	£20,840	s	85	E44,285	s	6	£3,960			£0	40 1	20,840		£7,294	187		£83,100 £97,219	
	Coordinate technical inputs to achieve Financial Close	L	40	£20,840	s	85 £	44,285	s	1	£495	-	-	-	-		-					
	Provide necessary input related to D&C, FM and Paymech elements of Financial Close including initial ROD process.						39,075		-	£0			£0	25 £	£0	50 8	£0 26,050	151		£78,645 £65,125	
												-	-	-	-						
	Subsonsultant management, administration & risks		636 L	331,356	1	403 E	730,963		120	£59,400		64 E	31,680	214 5	111 494	245   -	112 015		2418	1,376,908	

£4,455

€8,362

Total Buying Solutions Levys Discount

£ 40,045 £ 1,416,953 £ 1,445,292 £ 75,000 £ 1,370,292

#### Section B

### CORE TECHNICAL ADVISOR ROLE DURING CONSTRUCTION

Ref	Description	Da	ivis La	ngdon	Mo	tt Mac	donald	TI	homson	Gray	Turn	er & To	wnsend			FM			Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	MMFM	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
58	Delivery of formal Authority Representative role on behalf of NHSL	L	515	£268,315			£0			£0			£0		£0		£0	515		£268,315	
59	Attendance and reporting at Project Board meetings as required	L	59	£30,739	s	11	£5,731	s	36	£17,820			£0		£0		£0	106		£54,290	
60	Ongoing management of Independent Certifier in conjunction with SPV	L	40	£20,840			£0			£0			£0		£0		£0	40		£20,840	
61	Monitor that Project Co provides CDM Coordinator with necessary record drawings, operating manuals for inclusion in Health & Safety file			£0	L	0	£0			£0			£0		£0		£0	D		£0	
62	Maintain ongoing relationship and dialogue with SPV partner	L	119	£61,999			£0			£0			£0		60		£0	119		£61,999	
63	Management of Reviewable Design Data (RDD) process on behalf of Authority Including progress reporting, attendance at workshops, administration and stakeholder input			£0	L	231	£120,351			£0			£0		£0		60	231		£120,351	
64	Management and reporting of Change Control process (Capex)			£0			£0	L	72	£35,640			£0		£0		£Ο	72		£35,640	
65	Review of FM costs related to Change Control	L	0	EO			£0			03			60	40	£20,840	39	£20,319	79		£41,159	
66	Review of Lifecycle costs related to Change Control			£0			03	L	72	£35,640			£Ο		EO		60	72		£35,640	
67	Any required assessment and negotiation of any claims from SPV are excluded from this Scope.			£0			£0			£0			£0		£0		60	0		£0	
68	Liaison with SPV and Independent Certifier as required to achieve Handover	L	15	£7,815			£0			£0			£0		E0		60	15		£7,815	
69	Coordination and reporting of snagging and defects matters	L	44	£22,924			£0			£0			£0		£0	-	£0	44		£22,924	-
70	All activities related to commissioning and mobilisation by NHSL are excluded.																				
				£412.632			£126.082		180	£89,100		0	60	40	£20.840		£20.319			£668,973	

## Section C

### REFERENCE DESIGN (PROVISIONAL SUMS)

Ref	Description	Da	rvis La	ngdon	Mo	tt Mac	donald	T	homsor	Gray	Turn	er & To	wnsend			FM			Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	ммғм	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
			5/5			-			-		-										Provisional Sum Allowance only.
71	Management and Delivery of Reference Design		653	£340,213		284	£147,964		297	£147,015		75	£37,125		£0		£0	1,309		£672,317	Allowances based o current HFS allowances for Reference Design
72	Provisional Sum for Design Fees (as advised by NHSL)																			£2,000,000	
_			653	£340,213		284	£147,964		297	£147,015		75	£37,125	0	EO	0	£0		0	£2,672,317	

## Section D

## PRESCRIBED ADDITIONALS (PROVISIONAL SUMS)

Ref	Description	Da	vis Lar	gdon	Mo	tt Macd	onald	TI	nomson	Gray	Turn	er & To	wnsend			FM			Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	ммғм	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
73	Provision of Project Management & Programme Co- ordination for Little France site activities interacting with the NPD project																			Included in Total	

Ref	Description	Da	vis Lan	gdon	Mo	tt Macd	onald	TI	nomson (	Gray	Turn	er & To	wnsend			FM			Totals		Notes
		Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	Role	Man Days	Fee	DLFM	Fee	MMFM	Fee	Task Total Man Days	Section Total Man Days	Total Fee	
74	Provision of cost advisor services for the Little France site activities Interacting with the NPD project.	0 4 -																		Included in Total	
75	General Advisory Team duties interacting with the existing PFI provider (Consort)																			Included in Total	
76	General Advisory Team duties interacting with other stakeholders (Edinburgh University, Bio quarter, charitable bodies)																			Included in Total	
77	General Advisory duties and co-ordination relating to the Clinical Enabling Works in relation to the NPD project.																			Included in Total	
78	General Advisory duties and co-ordination relating to the Non Clinical Enabling Works in relation to the NPD project.																			Included in Total	
					$\vdash$	-		$\vdash$	-		$\vdash$			-		$\vdash$				£298,675	-

### SCHEDULE 3 - DETAILS OF CONSULTANT'S SUPPLIES TO SUB-CONSULTANT

Not applicable.

#### SCHEDULE 4 - TERMS OF PAYMENT

Invoices

All invoices to be sent to: -

Mott MacDonald Limited

3rd Floor

Caledonian Exchange 19a Canning Street

Edinburgh EH3 8EG

Project Code: 290961

Payment terms:

As agreed between the Consultant and Sub-consultant for each stage of the Sub-consultancy

Services as outlined in Annexure 2 or as subsequently agreed by the Parties.

Annexure 1: The Agreement between Client and Consultant

In connection with the provision of project management / technical advisory and design team services for the proposed NPD project for the Royal Hospital for Sick Children / Department of Clinical Neurosciences at the Royal Infirmary of Edinburgh

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### **SPECIAL TERMS**

1 Limitation of SERVICE PROVIDER's Liability

### **CONTRACT SCHEDULES**

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-	
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#### THIS CONTRACT is made

#### BETWEEN

- (1) LOTHIAN HEALTH BOARD, also known as NHS Lothian, having its principal address at Waverley Gate, 2-4 Waterloo Place, Edinburgh EH1 3EG (the "CLIENT"); and
- (2) MOTT MacDONALD LIMITED, a company incorporated under the Companies Acts (Company Number 01243967) whose registered address is at Mott MacDonald House, 8-10 Sydenham Road, Croydon, Surrey CR0 2EE (the "SERVICE PROVIDER").

#### **BACKGROUND**

- (A) The Lords Commissioners of Her Majesty's Treasury as represented by OGCbuying.solutions being a separate Trading Fund of Her Majesty's Treasury without separate legal personality ("the Authority") selected service providers including the SERVICE PROVIDER, to provide Project Management and Design Team Services;
- (B) The SERVICE PROVIDER undertook to provide the same on the terms set out in a framework agreement number RM457/I signed on 20 October and 2<sup>nd</sup> November 2009 (the Framework Agreement);
- (C) The Authority established a set of framework agreements, including the Framework Agreement, in consultation with and for the benefit of public sector bodies. The Authority has overall responsibility for management of those framework agreements;
- (D) The Authority and the SERVICE PROVIDER agree that public sector bodies within the UK may enter into Contracts under the Framework Agreement;
- (E) The CLIENT is granted rights by the Authority in accordance with the Contracts (Rights of Third Parties) Act 1999 to enter into a Contract under the Framework Agreement pursuant to an Order served by the CLIENT on the SERVICE PROVIDER:
- (F) The CLIENT served an Order for services on the SERVICE PROVIDER on 22<sup>nd</sup> March 2011; and
- (G) The SERVICE PROVIDER confirmed its agreement to the terms of the Order and its acceptance of the Order and hereby duly executes this Contract.

### IT IS AGREED AS FOLLOWS:

### **DEFINITIONS, DOCUMENTS AND REPRESENTATIVES**

### 1. Definitions and Interpretation

- 1.1 As used in this Contract:
- 1.1.1. the terms and expressions set out in Schedule 2-1 shall have the meanings set out therein;
- 1.1.2. the masculine includes the feminine and the neuter:
- 1.1.3. the singular includes the plural and vice versa; and
- 1.1.4. the words "include", "includes" and "including" are to be construed as if they were immediately followed by the words "without limitation".
- 1.2. A reference to any statute, enactment, order, regulations or other similar instrument shall be construed as a reference to the statute, enactment, order, regulation or instrument as amended by any subsequent statute, enactment, order, regulation or instrument or as contained in any subsequent reenactment thereof.
- 1.3. A reference to any document other than as specified in Clause 1.2 shall be construed as a reference to the document as at the date of execution of this Contract.
- 1.4. Headings are included in this Contract for ease of reference only and shall not affect the interpretation or construction of this Contract.
- 1.5. References to "Clauses" and "Schedules" are, unless otherwise provided, references to the Clauses of and Schedules to this Contract.
- 1.6. Terms or expressions contained in this Contract which are capitalised but which do not have an interpretation in Schedule 2-1 shall be interpreted in accordance with the common interpretation within the market for project management and design team services where appropriate. Otherwise they shall be interpreted in accordance with the dictionary meaning.
- 1.7 To the extent that this Contract is expressed to confer rights or benefits on a party who is not a party to this Contract, that party shall subject to and by virtue of the Scots law doctrine of *jus quaesitum tertio* be entitled to enforce those rights as if it was a party to this Contract. For the avoidance of doubt the consent of any person other than the CLIENT (or the SERVICE PROVIDER, as the case may be) is not required to vary or terminate this Contract.
- 1.8 Except as provided in Clause 1.7 a person who is not a party to this Contract shall have no rights by virtue of the Scots law doctrine of *jus quaesitum tertio* to enforce any term of this Contract. This Clause 1.8 does not affect any right or remedy of any person that exists or is available otherwise than pursuant to that doctrine.
- 1.9 This Contract shall be governed by and construed in accordance with the law of Scotland.

1.10 Where under this Contract an act is required to be done within a specified period of days after or from a specified date, the period shall begin immediately after that date. Where the period would include a day which is a Public Holiday that day shall be excluded.

### 2. Inconsistency and Entire Agreement

- 2.1 The documents forming this Contract shall be read and taken together. However, in the event and to the extent only of any conflict or inconsistency in the provisions of the Clauses of this Contract and the provisions of the Schedules, the following order of precedence shall prevail:
- 2.1.1 the Special Terms
- 2.1.2 the Conditions of Contract and Schedule 2-1 and the details set out in the Order
- 2.1.3 Schedule 2-2 (CLIENT'S Requirements)
- 2.1.4 Schedule 2-3 (The Ordered Services and Fee Schedule)
- 2.1.5 other Schedules
- 2.2 This Contract constitutes the entire agreement and understanding between the parties in relation to the Contract and supersedes all prior representations, arrangements, understandings, agreements, statements, representations or warranties (whether written or oral) relating to the Ordered Services.
- 2.3 Each party irrevocably and unconditionally waives any rights it may have to claim damages and/or to rescind the Contract for any misrepresentation or for breach of any warranty not contained in the Contract unless such misrepresentation or warranty was made fraudulently.

#### 3. Responsibility for documents

- 3.1 The SERVICE PROVIDER shall ensure that all documents which are prepared and submitted by the SERVICE PROVIDER, its Sub-Contractors, staff and agents including any feasibility study, design or reports, drawings and any other documents supplied in connection therewith but excluding drafts of such documents, shall have been prepared to the Contract Standard. It is hereby acknowledged and agreed that the CLIENT shall be entitled to rely on all documents submitted by the SERVICE PROVIDER, its Sub-Contractors, staff and agents for the use of such documents in connection with the Project to which they relate.
- 3.2 The CLIENT may examine and/or comment on schedules, calculations, surveys, reports, specifications, drawings or other documents and/or information which are in the possession of the SERVICE PROVIDER and which concern this Contract at any time, but any such examination or comment (or the absence of any such examination or comment) by the CLIENT will not relieve the SERVICE PROVIDER of any responsibility for the Ordered Services to be provided under this Contract. If the SERVICE

NHSL MM Head Agreement.DOC

PROVIDER finds any ambiguity in or conflict between any document forming part of this Contract, or in any drawings, information or documents issued by the CLIENT in connection with this Contract, then the SERVICE PROVIDER shall notify the CLIENT forthwith, who shall issue such instructions as the CLIENT considers appropriate.

### 4. CLIENT'S Representative

The CLIENT'S Representative shall act on behalf of the CLIENT in issuing instructions to the SERVICE PROVIDER and for receiving reports, requests or statements or in dealing with any other matter concerning the Contract.

### 5. Persons dealing with this Contract

The SERVICE PROVIDER shall appoint a partner or director of the SERVICE PROVIDER, firm or company, who shall be the Contract Manager and shall be duly authorised to receive instructions and shall be the point of contact between the CLIENT and the SERVICE PROVIDER throughout the course of this Contract and, subject to reasonable notice, will, on behalf of the SERVICE PROVIDER, attend all meetings with the CLIENT regarding matters relevant to this Contract and will approve and sign all reports submitted to the CLIENT by the SERVICE PROVIDER. No change in this named individual shall be made by the SERVICE PROVIDER without receiving the prior written approval of the CLIENT.

#### 6. SERVICE PROVIDER'S staff

- 6.1 The SERVICE PROVIDER shall employ appropriately qualified, competent, suitable and experienced staff for the proper provision of the Ordered Services to the Contract Standard.
- 6.2 The SERVICE PROVIDER shall use reasonable endeavours to maintain continuity of the SERVICE PROVIDER'S staff.
- 6.3 The names, experience and professional qualifications of those members of the SERVICE PROVIDER'S staff who will be involved in providing the Ordered Services shall be notified to and approved by the CLIENT prior to such persons commencing their duties. Such notification shall indicate the services they are to perform. No change to those members of the SERVICE PROVIDER'S staff shall be made without receiving the prior approval of the CLIENT. The CLIENT may (but not unreasonably or vexatiously) require the SERVICE PROVIDER to cease to use the services of any member of the SERVICE PROVIDER'S staff for the provision of the Ordered Services. Subject to the approval of the CLIENT, the SERVICE PROVIDER shall replace such persons as the need arises and at the SERVICE PROVIDER'S own expense.
- 6.4 Where the SERVICE PROVIDER is responsible for the appointment of site inspection staff, then the SERVICE PROVIDER shall take full responsibility for the supervision of such staff, for the scope of their duties, payment for their services and for the sufficiency of their performance.

### 7. Environmental Requirements

- 7.1 The SERVICE PROVIDER shall comply in all material respects with all applicable environmental laws and regulations in force from time to time in relation to the Ordered Services. Without prejudice to the generality of the foregoing, the SERVICE PROVIDER shall promptly provide all such information regarding the environmental impact of the Ordered Services as may reasonably be requested by the CLIENT.
- 7.2 The SERVICE PROVIDER shall meet all reasonable requests by the CLIENT for information evidencing compliance with the provision of this Clause 7 by the SERVICE PROVIDER.

#### **GENERAL OBLIGATIONS**

#### 8. Ordered Services

The SERVICE PROVIDER shall perform and carry out the Ordered Services from the Service Commencement Date and shall at all times perform the Ordered Services to the Contract Standard.

### 9. Professional responsibility

- 9.1 The SERVICE PROVIDER shall perform the Ordered Services to the following standards (the Contract Standard) which means the performance of the Ordered Services:-
- 9.1.1 using all reasonable skill care and diligence as would a competent and appropriately qualified consultant or other appropriate professional carrying out services of a similar specification, nature, scope, size and complexity as the Ordered Services;
- 9.1.2 in accordance with all relevant provisions of the Contract;
- 9.1.3 in accordance with the SERVICE PROVIDER'S Programme, as applicable;
- 9.1.4 in accordance with all Statutory Requirements;
- 9.1.5 Not Used
- 9.1.6 in accordance with the reasonable instructions of the CLIENT'S Representative;
- 9.1.7 in accordance with the SERVICE PROVIDER'S Method Statement; and
- 9.1.8 in coordination and liaison with any other contractor or consultant appointed by the CLIENT.

#### **Duty of Care - Design**

- 9.2 In so far as the SERVICE PROVIDER is responsible for design, the SERVICE PROVIDER:
- 9.2.1 warrants and undertakes that it will use all due skill, care and diligence in the design of the Project that would reasonably be expected of a competent professional designer experienced in carrying out design activities of a similar nature, scope and complexity to those comprised in the Project; and
- 9.2.2 shall be responsible for and liable for the design of the Project.
- 9.3 The SERVICE PROVIDER warrants in relation to the performance of the Ordered Services that all materials, goods and substances used or specified in the course of carrying out the Ordered Services shall be suitable for the purposes included or to be reasonably inferred from the Contract and shall be selected in accordance with the publication "Good Practice in the Selection of

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Construction Materials" (1997: Ove Arup and Partners, or any update current at the time this Contract is entered into).

#### 10. Duration

The Contract shall commence on the Service Commencement Date and shall remain in full force and effect for the Contract Period unless the Contract is terminated sooner in accordance with these Conditions or in accordance with Common Law or statute.

### 11. Responsibility for work by others

- 11.1 Where the SERVICE PROVIDER is required to incorporate work provided by others, the SERVICE PROVIDER'S responsibility in respect of such work shall be limited to the review thereof to the extent required to ensure the satisfactory performance of the Ordered Services.
- 11.2 Notwithstanding Clause 11.1, if the SERVICE PROVIDER shall find any discrepancy in or divergence between any documents and/or information, which shall include work provided by others, the SERVICE PROVIDER shall immediately give to the CLIENT written notice specifying the discrepancy or divergence.
- 11.3 The SERVICE PROVIDER shall inform the CLIENT'S Representative upon it becoming apparent to him
  - 11.3.1 that there is any inconsistency or incompatibility between any of the CLIENT'S requirements;
  - 11.3.2 if there is any need to vary the CLIENT'S requirements or the Specification;

the SERVICE PROVIDER shall obtain any instruction to so vary in writing from the CLIENT'S Representative.

#### 12. Co-ordination of SERVICE PROVIDER'S Ordered Services

- 12.1 The SERVICE PROVIDER shall:
- 12.1.1 take account of the role of any other contractors who may be appointed by the CLIENT; and
- 12.1.2 co-ordinate and integrate the Ordered Services with the services provided by other contractors to the extent necessary to ensure the satisfactory completion of the Ordered Services; and,

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- 12.1.3 where Schedule 2-2 specifies that the SERVICE PROVIDER is appointed as Lead Design Consultant, be responsible for the co-ordination and integration of the services being provided by the other contractors; and
- 12.1.4 as necessary, regularly liaise with and consult with all other contractors appointed by the CLIENT; and
- 12.1.5 keep the relevant contractors fully informed of all matters related to the Ordered Services which are relevant to the services being provided by those relevant contractors.

### 13. SERVICE PROVIDER'S obligation to ensure

- 13.1 Where in this Contract the SERVICE PROVIDER is under an obligation to ensure that events occur which are under the direct control of others and, due to others, the SERVICE PROVIDER is unable to comply with that obligation, then the SERVICE PROVIDER will be liable to the CLIENT only in the event that the SERVICE PROVIDER has failed to use reasonable endeavours to ensure the occurrence of the event.
- 13.2 The SERVICE PROVIDER does not warrant the work of others, save that nothing in this Clause 13 shall affect the SERVICE PROVIDER'S responsibility for Sub-Contractors as stated in Clause 50 (Sub-Contractors). Notwithstanding this, the SERVICE PROVIDER will be required to inform the CLIENT in writing of the action taken to resolve the matter and recommend to the CLIENT a further course of action to ensure the occurrence of the event.

#### 14. Compliance with Statutory Requirements

- 14.1 In providing any Ordered Services or in fulfilling any obligation under the terms of this Contract, the SERVICE PROVIDER shall ensure compliance with all Statutory Requirements including without limitation the Health and Safety at Work Act 1974, the Freedom of Information (Scotland) Act 2002, and the Construction (Design and Management) Regulations 2007 (as applicable). The CLIENT shall pay any statutory charges in respect of necessary applications for planning permission and/or building regulation approval.
- 14.2 The SERVICE PROVIDER shall bear the cost of ensuring that the Ordered Services shall comply with all Statutory Requirements and any amendments thereto except where any such amendment could not reasonably have been foreseen by the SERVICE PROVIDER at the date hereof.
- 14.3 Where such reasonably unforeseeable amendments are necessary, the CLIENT and the SERVICE PROVIDER shall use all reasonable endeavours to agree upon reasonable adjustments to the Fee Schedule as may be necessary to compensate the SERVICE PROVIDER for such additional costs as are both reasonably and necessarily incurred by the SERVICE PROVIDER in accommodating such amendments.

#### 15. Freedom of Information

- 15.1 The SERVICE PROVIDER acknowledges that the CLIENT is subject to the requirements of the Code of Practice on Government Information, FOIA and the Environmental Information Regulations and shall assist and cooperate with the CLIENT to enable the CLIENT to comply with its Information disclosure obligations.
- 15.2 The SERVICE PROVIDER shall, and shall procure that its Sub-Contractors shall:
  - 15.2.1 transfer to the CLIENT all Requests for Information that it receives as soon as practicable and in any event within two (2) Working Days of receiving a Request for Information;
  - 15.2.2 provide the CLIENT with a copy of all Information in its possession, or power in the form that the CLIENT requires within five (5) Working Days (or such other period as the CLIENT may specify) of the CLIENT'S request; and
  - 15.2.3 provide all necessary assistance as reasonably requested by the CLIENT to enable the CLIENT to respond to the Request for Information within the time for compliance set out in the FOIA or the Environmental Information Regulations.
- 15.3 The CLIENT shall be responsible for determining in its absolute discretion whether any Information is exempt from disclosure in accordance with the provisions of the Code of Practice on Government Information, FOIA or the Environmental Information Regulations.
- 15.4 In no event shall the SERVICE PROVIDER respond directly to a Request for Information unless expressly authorised to do so by the CLIENT.
- The SERVICE PROVIDER acknowledges that the CLIENT may, acting in accordance with the Scottish Ministers' Code of Practice on the Discharge of Functions by Scottish Public Authorities under the Freedom of Information (Scotland) Act 2002 and the Environmental Information (Scotland) Regulations 2004 December 2010 SG/2010/257, be obliged to disclose Information without consulting or obtaining consent from the SERVICE PROVIDER, or despite having taken the SERVICE PROVIDER'S views into account.
- 15.6 The SERVICE PROVIDER shall ensure that all Information is retained for disclosure and shall permit the CLIENT to inspect such records as requested from time to time.

#### 16. Indemnity and Insurance

16.1 The SERVICE PROVIDER shall be responsible for, and shall release and indemnify the CLIENT against all liability for damages, losses, liabilities, claims, actions, costs, expenses (including the cost of legal or professional services, legal costs being on an indemnity basis), proceedings, demands

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and charges (collectively "Losses") whether arising under statute, contract or at common law arising from:

- 16.1.1 death or personal injury;
- 16.1.2 loss of or damage to the CLIENT's property;
- 16.1.3 third party actions, claims and/or demands brought against the CLIENT or any of its officers, employees, agents or contractors;
  - in each case which may arise out of, or in consequence of the default, negligence or other tortious or delictual act or omission or breach of contract of the SERVICE PROVIDER or any of its officers, employees, agents or subcontractors, save to the extent that any such Losses are caused by the negligence or wilful misconduct of the CLIENT or any of its officers, employees, agents or contractors or by the breach by the CLIENT of its obligations under this Contract".
- The SERVICE PROVIDER shall by such existing or new policies as he sees fit effect and maintain from the time he commences work on any Site or any part of a Site or from the time he commences the Ordered Services (if earlier) to the expiration of the term, employer's liability insurance in respect of persons in his employment, appropriate to the nature of the Ordered Services. Such insurance shall comply with the Employer's Liability (Compulsory Insurance) Act 1969 (or, if the Ordered Services are performed in Northern Ireland) Order 1972 and any subordinate legislation made thereunder, and shall be for the minimum amount of £10,000,000 (or such other minimum amount as may be stated in the Order) for any one occurrence or series of occurrences arising out of one event.
- 16.3 The Service Provide shall by such existing or new policies as he sees fit effect and maintain for the same period public liability insurance against legal liability for death or personal injury to any persons and loss or damage to property arising from or in connection with the Ordered Services, which is not covered by employer's liability insurance referred to in Clause 16(2), for the minimum amount stated in the Order, such public liability insurance to include a provision for indemnity to the CLIENT in respect of the SERVICE PROVIDER'S liability under Clause 16(1) provided that the insurance which the SERVICE PROVIDER is required to effect and maintain under this paragraph need not cover loss or damage caused by any Accepted Risk.
- The CLIENT shall have the right to receive, on request, a copy of insurances required to be effected or maintained by the SERVICE PROVIDER under this Clause. The SERVICE PROVIDER shall within 21 Days of the Service Commencement Date, and also within 21 Days of any subsequent renewal or expiry date of relevant insurances, send to the CLIENT a certificate from his insurer or broker attesting that insurance has been effected in accordance with the Contract.
- All insurances required to be effected or maintained by the insuring party under this Clause shall be with reputable insurers, to whom the other party has no reasonable objection, lawfully carrying on such insurance business in the United Kingdom, and upon customary and usual terms prevailing for the time being in the insurance market. The said terms and conditions shall not

include any term or condition to the effect that any insured must discharge any liability before being entitled to recover from the insurers, or any other term or condition which might adversely affect the rights of any person to recover from the insurers pursuant to the Third Parties (Rights Against Insurers) Act 1930 or the Third Parties (Rights Against Insurers) Act (Northern Ireland) 1930 as amended by the Insolvency (Northern Ireland) Order 1989 and/or pursuant to the Third Parties (Rights Against Insurers) Act 2010.

- 16.6 All insurances required to be effected or maintained under Clause 16.3 shall be in the joint names of the CLIENT, and such other person as the CLIENT may reasonably require (including, without limitation, the CLIENT'S Consultants), the SERVICE PROVIDER and all Sub-Contractors provided that, where the terms of the relevant insurance policy are such that the SERVICE PROVIDER is unable to effect insurance jointly, the SERVICE PROVIDER shall ensure that the policy includes an "Indemnity to Principal" provision in standard insurance industry terms.
- 16.7 If, without the approval of the CLIENT, the SERVICE PROVIDER fails to effect and maintain insurance he is required to effect and maintain under this Clause as described, or obtains a different policy of insurance, or fails to provide a copy of insurances or certificates in accordance with this Clause the CLIENT may, but is not required to, effect and maintain appropriate insurance cover and deduct the cost of doing so from any payment due to the SERVICE PROVIDER under the Contract, or recover such sum from the SERVICE PROVIDER as a debt.
- 16.8 For the avoidance of doubt, it is agreed that nothing in this Clause shall relieve the SERVICE PROVIDER from any of his obligations and liabilities under the Contract.

#### **Professional Indemnity Insurance**

- Unless stated in the Order or agreed otherwise, the SERVICE PROVIDER 16.9 shall maintain professional indemnity insurance upon customary and usual terms and conditions prevailing for the time being in the insurance market, and with reputable insurers lawfully carrying on such insurance business in the United Kingdom (on the basis and in an amount not less than that required by the Order), provided always, that such insurance is available at commercially reasonable rates. The said terms and conditions shall not include any term or condition to the effect that the SERVICE PROVIDER must discharge any liability before being entitled to recover from the insurers. or any other term or condition which might adversely affect the rights of any person to recover from the insurers pursuant to the Third Parties (Rights Against Insurers) Act 1930 or the Third Parties (Rights Against Insurers) Act (Northern Ireland) 1930 as amended by the Insolvency (Northern Ireland) Order 1989 and/or pursuant to the Third Parties (Rights Against Insurers) Act 2010. The SERVICE PROVIDER shall not, without the prior approval in writing of the CLIENT, settle or compromise with the insurers any claim which the SERVICE PROVIDER may have against the insurers and which relates to a claim by the CLIENT against the SERVICE PROVIDER, or by any act or omission lose or prejudice the SERVICE PROVIDER'S right to make or proceed with such a claim against the insurers.
- 16.10 The SERVICE PROVIDER shall immediately inform the CLIENT if such insurance ceases to be available at rates that the SERVICE PROVIDER

considers to be commercially reasonable. Any increased or additional premium required by insurers by reason of the SERVICE PROVIDER'S own claims record or other acts, omissions, matters or things particular to the SERVICE PROVIDER'S shall be deemed to be within commercially reasonable rates.

- 16.11 The SERVICE PROVIDER shall fully co-operate with any measures reasonably required by the CLIENT including (without limitation) completing any proposals for insurance and associated documents, maintaining such insurance at rates above commercially reasonable rates if the CLIENT undertakes in writing to reimburse the SERVICE PROVIDER in respect of the net cost of such insurance to the SERVICE PROVIDER above commercially reasonable rates or, if the CLIENT effects such insurance at rates at or above commercially reasonable rates, reimbursing the CLIENT in respect of what the net cost of such insurance to the CLIENT would have been at commercially reasonable rates.
- 16.12 As and when reasonably required to do so by the CLIENT, the SERVICE PROVIDER shall produce for inspection documentary evidence in the form of a broker's certificate confirming that his professional indemnity insurance is being maintained.
- 16.13 The above obligation in respect of professional indemnity insurance shall continue notwithstanding determination of the SERVICE PROVIDER's employment under the Contract for any reason whatsoever, including (without limitation) breach by the CLIENT.

### 17. Access to property

- 17.1 If, in the course of undertaking the Ordered Services, the SERVICE PROVIDER is required to enter any establishment, the SERVICE PROVIDER shall comply with the requirements of the CLIENT, and the occupier's rules and regulations regarding admission and shall only visit the establishment at times suitable to the CLIENT or the occupier.
- 17.2 The SERVICE PROVIDER shall comply with any changes to those requirements, rules or regulations, notified to him as a CLIENT'S instruction for a change in the Ordered Services of the SERVICE PROVIDER in accordance with Clause 43 (Payment for changed Ordered Services and variations) during the provision of the Ordered Services.
- 17.3 The names and addresses of all the SERVICE PROVIDER'S or Sub-Contractors' staff to be employed in connection with this Contract and requiring access to property shall be submitted to the CLIENT or the occupier concerned to enable the necessary clearances to be obtained.

### 18. Equal Opportunities & Race Relations

The SERVICE PROVIDER shall comply with all applicable Equalities Legislation in its performance of the Contract and shall take all reasonable steps to ensure that all servants, employees, agents and sub-contractors of the SERVICE PROVIDER

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engaged in the provision of the Ordered Services do not unlawfully discriminate within the meaning and scope of the Equalities Legislation. This Clause 18 shall be without prejudice to the SERVICE PROVIDER'S general obligation to comply with Statutory Requirements.

### 19. Change in SERVICE PROVIDER'S business

The SERVICE PROVIDER shall inform the CLIENT in writing of any contemplated change of legal status or reorganisation or restructuring of the SERVICE PROVIDER'S business or practice not less than one month prior to such event taking place. In the event of such a change, unless the CLIENT otherwise agrees in writing, the SERVICE PROVIDER and its constituent members shall have the same liability as if no such change of legal status or reorganisation or restructuring of the SERVICE PROVIDER'S business or practice had taken place.

#### 20. Conflicts of Interest

- 20.1 The SERVICE PROVIDER shall disclose to the CLIENT'S Representative any actual or potential conflict of interest arising from the SERVICE PROVIDER'S provision of the Ordered Services as soon as is reasonably practical after becoming aware that such actual or potential conflict exists.
- 20.2 Should the parties be unable to either remove the conflict of interest and/or to alleviate its effect the CLIENT shall have the right to terminate this Contract in accordance with Clause 46.
- 20.3 The SERVICE PROVIDER shall immediately notify the CLIENT's Representative of any circumstances giving rise to or potentially giving rise to conflicts of interest relating to the SERVICE PROVIDER (including without limitation its reputation and standing) and/or the CLIENT of which it is aware or anticipates may justify the CLIENT taking action to protect its interests.

### 21. Copyright

- 21.1 The copyright and all other Intellectual Property Rights in all designs, drawings, specifications, photographs, plans, surveys, reports, and all other documents and/or information (Drawings), prepared by or on behalf of the SERVICE PROVIDER in relation to the Contract, and the work executed from them, shall be the property of and vested in the CLIENT, which reserves the right to reproduce such Drawings, or to execute, or to have executed, work or services in accordance therewith as may be required by the CLIENT.
- In the event that the SERVICE PROVIDER does not own the copyright or any Intellectual Property Right in any Drawing the SERVICE PROVIDER shall use all reasonable endeavours to procure the right to grant such rights to the CLIENT to use any such copyright or Intellectual Property Rights from any third party owner of the copyright or Intellectual Property Rights. In the event the SERVICE PROVIDER is unable to procure the right to grant to the CLIENT in accordance with the foregoing it shall procure that the third party grants a direct licence to the CLIENT on industry acceptable terms.

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- 21.3 The SERVICE PROVIDER waives any moral right to be identified as author of the Drawings in accordance with section 77, Copyright Designs and Patents Acts 1988 and any right not to have the Drawings subjected to derogatory treatment in accordance with section 8 of that Act as against the CLIENT or any licensee or assignee of the CLIENT.
- 21.4 In the event that any act unauthorised by the CLIENT infringes a moral right of the SERVICE PROVIDER in relation to the Drawings the SERVICE PROVIDER hereby undertakes, if the CLIENT so requests, to institute proceedings for infringement of those moral rights and the CLIENT shall bear the cost of such proceedings.
- 21.5 The SERVICE PROVIDER warrants to the CLIENT that he has not granted and shall not (unless authorised by the CLIENT) grant any rights to any third party to use or otherwise exploit the Drawings.
- 21.6 The SERVICE PROVIDER warrants that the use of the Drawings for the purposes of this Contract will not infringe the rights of any third party.
- 21.7 For no additional fee the SERVICE PROVIDER shall supply copies of the Drawings to the CLIENT; and to the CLIENT'S other consultants as necessary to enable them to discharge their respective functions in relation to this Contract or related works.
- 21.8 After the termination or conclusion of the SERVICE PROVIDER'S employment hereunder, the SERVICE PROVIDER shall supply the CLIENT with copies and/or computer discs of such of the Drawings as the CLIENT may from time to time request, and the CLIENT shall pay the SERVICE PROVIDER'S reasonable costs fro producing such copies or discs.
- 21.9 Priced documents may be used by the CLIENT for the purposes of indexing and analysis without prior approval by the SERVICE PROVIDER, and the SERVICE PROVIDER shall ensure that a similar clause is inserted in all documents to be priced by contractors, or other contractors or subcontractors.

#### 22. SERVICE PROVIDER'S records

- 22.1 The SERVICE PROVIDER and any Sub-Contractor shall retain full and proper records of all documents and/or information relating to this Contract including but not limited to any data or notes whether held on paper, electronically or by any other means for a period of 12 (twelve) years (or, if longer, for the period during which the SERVICE PROVIDER is required to maintain insurance pursuant to Clause 16 (Insurance)) following completion of this Contract, and the CLIENT shall at any time have the right to audit any accounts and examine any documents and/or information so retained by the SERVICE PROVIDER.
- 22.2 The SERVICE PROVIDER, and any Sub-Contractor appointed by the SERVICE PROVIDER, shall maintain detailed records of time spent on the Ordered Services performed on a time basis and shall, when requested, make those records available to the CLIENT.

#### SECURITY

#### 23. Official secrets and confidentiality

#### **Official Secrets**

23.1 The SERVICE PROVIDER shall take all reasonable steps to ensure that all persons employed by the SERVICE PROVIDER or Sub-Contractors in connection with the Ordered Services and this Contract are aware of the Official Secrets Act 1989 and, where appropriate, with the provisions of the Atomic Energy Act 1946 and that these Acts apply to them during the execution of this Contract and after the expiry or termination of this Contract.

#### Confidentiality

- 23.2 The SERVICE PROVIDER shall ensure that neither he nor his employees without the written consent of the CLIENT'S Representative make use of, for their own purposes, or disclose to any other person, other than in accordance with the provision of the Ordered Services (except as may be required by law), all or any documents or information provided to the SERVICE PROVIDER by the CLIENT or the CLIENT'S Representative pursuant to this Contract, or which shall come into the possession or knowledge of the SERVICE PROVIDER or any of his employees by virtue of this Contract. All of the above information will be confidential to the CLIENT, and the SERVICE PROVIDER and his employees will be bound by this Clause during the period of this Contract and at all times thereafter.
- 23.3 The SERVICE PROVIDER will indemnify and keep indemnified the CLIENT against all actions, demands, proceedings, damages, costs, charges and expenses whatsoever in respect of any breach by the SERVICE PROVIDER of this Clause. Such indemnity will be without prejudice to any other rights the CLIENT may have.
- 23.4 The SERVICE PROVIDER shall maintain as confidential at all times and shall not divulge by any means of communication (whether oral, written, digital or by some other means) all information supplied by the CLIENT or produced for the CLIENT by the SERVICE PROVIDER in accordance with the Contract.
- 23.5 The SERVICE PROVIDER shall not without the consent of the CLIENT publish, discuss or issue alone or in conjunction with any other person any articles, press releases, or other information relating to the provision of the Ordered Services.
- 23.6 The provisions of this Clause shall survive the expiry of this Contract indefinitely.

### 24 Corrupt Gifts and Payment of Commission

- 24.1 The SERVICE PROVIDER shall not:
  - 24.1.1 offer to give or agree to give any person in Her Majesty's Service any gift or consideration of any kind as an inducement or reward for doing, forbearing to do, or for having done or forborne to do any act in relation to the obtaining or execution of this Contract or any other

contract for Her Majesty's Service or for showing favour or disfavour to any person in relation to this or any other contract for Her Majesty's Services;

- 24.1.2 enter into this Contract or any other contract with Her Majesty's Service in connection with which commission has been paid or agreed to be paid by him or on his behalf, or to his knowledge, unless before this Contract is made particulars of any such commission and of the terms and conditions of any agreement for the payment thereof have been disclosed in writing to the CLIENT.
- 24.2 Any breach of Clause 24.1.1 by the SERVICE PROVIDER or by anyone employed by him or acting on his behalf (whether with or without the knowledge of the SERVICE PROVIDER) or the commission of any offence by the SERVICE PROVIDER or by anyone employed by him or acting on his behalf under the Prevention of Corruption Acts 1889 to 1916 and/or the Bribery Act 2010, in relation to this Contract or any other contract with Her Majesty's Service shall entitle the CLIENT to terminate this Contract and recover from the SERVICE PROVIDER the amount of any loss resulting from such termination and/or to recover from the SERVICE PROVIDER the amount or value of any such gift, consideration or commission.
- 24.3 Any dispute, difference or question arising in respect of the interpretation of this Clause 24, the right of the CLIENT to terminate this Contract or the amount or value of any such gift, consideration or commission shall be decided by the CLIENT whose decision shall be final and conclusive enable them to discharge their respective functions in relation to this Contract.

#### CONTROLS AND PROGRAMMING

### 25. Budget Requirements

The SERVICE PROVIDER shall have due regard in the performance of the Ordered Services to the CLIENT'S budget requirements for the Project. The SERVICE PROVIDER shall take no action which may result in that limit being exceeded without first obtaining the CLIENT'S written approval for that expenditure. Further if the SERVICE PROVIDER becomes aware of any circumstances which may cause those budget requirements to be exceeded, the SERVICE PROVIDER shall inform the CLIENT without delay.

### 26. Disputes between contractors

If any difference arises between the contractor and any other consultant or contractor of the CLIENT, the SERVICE PROVIDER shall use is best endeavours to achieve a reconciliation. If the reconciliation is not achieved and is not likely to be achieved then before such difference becomes detrimental to the Project the SERVICE PROVIDER shall refer the matter or difference to the CLIENT for instructions.

### 27. Project variations

In the event that there is any proposed variation to the Project the SERVICE PROVIDER shall inform the CLIENT and provide details of the estimated cost and time effect of the proposed variation. No variation shall be introduced without obtaining the prior written consent of the CLIENT unless failure to give immediate authority for the variation could result in danger to life or where substantial additional expenditure could be avoided by taking such immediate action. In those circumstances, the SERVICE PROVIDER shall inform the CLIENT in writing immediately following the issue of the variation together with reasons for such urgency.

#### 28. SERVICE PROVIDER not to commit the CLIENT

The SERVICE PROVIDER shall ensure that either in correspondence or by any other means, the SERVICE PROVIDER shall not commit the CLIENT to any cost or to any action whilst dealing with others on behalf of the CLIENT unless the CLIENT'S prior written approval to such commitment has been obtained.

### 29. SERVICE PROVIDER'S Programme

29.1 Unless agreed otherwise the SERVICE PROVIDER shall, within 21 (twenty-one) Days of the Service Commencement Date, prepare and submit to the

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CLIENT for approval a SERVICE PROVIDER'S Programme which shall include -

- 29.1.1 the order and timing of the operations the SERVICE PROVIDER plans to do in order to provide the Ordered Services in accordance with Clause 10 (Professional responsibility);
- 29.1.2 the dates when the SERVICE PROVIDER plans to complete work needed to allow the CLIENT and all others involved to do their work; and
- 29.1.3 the dates when information is required by the SERVICE PROVIDER from the CLIENT and all others involved.
- 29.2 The SERVICE PROVIDER shall ensure that the SERVICE PROVIDER'S Programme is fully coordinated with that of the CLIENT and all others involved.
- 29.3 The CLIENT may, at any time, instruct the SERVICE PROVIDER to change the SERVICE PROVIDER'S Programme for any reason.
- 29.4 Any approval referred to in Clause 29(1) shall not be construed as the CLIENT'S acceptance of the sufficiency or adequacy of the SERVICE PROVIDER'S Programme.
- 29.5 The CLIENT reserves the right to change any of the dates in the Programme from time to time by providing written notice of such changes to the SERVICE PROVIDER. If the SERVICE PROVIDER objects to any changes it shall promptly notify the CLIENT of its reasonable objections to such changes.
- 29.6 If at any time the SERVICE PROVIDER is delayed or becomes aware of any circumstance which may prevent him from meeting programme requirements he shall forthwith inform the CLIENT and propose any measures which may be practicable to recover the delay or to avoid or reduce the anticipated delay.
- 29.7 The SERVICE PROVIDER shall comply at his own cost with all reasonable instructions of the CLIENT given for the purpose of achieving budget or programme requirements or minimising or recovering any cost overrun or delay.

#### 30. Presentations

When, in providing the Ordered Services, the SERVICE PROVIDER is required to report to the CLIENT giving recommendations, the SERVICE PROVIDER shall without additional charge and when specifically instructed to do so by the CLIENT, make a formal presentation to the CLIENT of matters relevant to those recommendations.

#### 31. Tender Documents and Contracts

31.1 The SERVICE PROVIDER shall obtain the prior written instructions of the CLIENT regarding the CLIENT'S procedures for obtaining tenders, the forms of contract to be used or any specification requirements or other matters relevant to the type of work to be dealt with by the SERVICE PROVIDER.

The SERVICE PROVIDER shall also have due regard to all Statutory Requirements when conducting a procurement exercise.

31.2 In the event that the SERVICE PROVIDER is to produce tender documents it shall prepare all tender documents carefully and professionally, submitting them to the CLIENT and any other advisers of the CLIENT as directed by the CLIENT prior to dispatch.

### NOTICES, INSTRUCTIONS, ADDITIONAL SERVICES AND PAYMENTS

#### 32. Notices

- 32.1 All communications between the CLIENT and the SERVICE PROVIDER required by or authorised under the Contract including any instruction, consent, approval or authorisation shall be made in a form that can be read, copied and recorded. Communications shall take effect when received in such a form at the address of the recipient stated in Schedule 2-4, or an address subsequently notified to the other party. Communications that are not made in such a form shall be of no effect unless and until confirmed by the sender or recipient in a form that can be read, copied and recorded. All notices shall be in writing and shall be deemed duly given or made:
  - 32.1.1 2 (two) working days after being sent by prepaid special delivery post or;
  - 32.1.2 when delivered by hand, and a signature acknowledging its receipt has been obtained or;
  - 32.1.3 when received in the case of a facsimile provided the relevant answer back is obtained.
- 32.2 In each case the notice must:-
  - 32.2.1 refer to the Contract;
  - 32.2.2 be marked for the attention of the appropriate officer, person or department as notified to the other party in writing.
- 32.3 The notices shall be sent to the addresses of each party to the Contract specified at the beginning of the Contract or to such addresses as each party shall notify the other in writing within 5 (five) working days of any change in its address for service.
- 32.4 Any notice served on a non Working Day or after Working Hours shall be deemed to be served on the following Working Day.
- 32.5 For the avoidance of doubt, electronic mail shall constitute a valid form of communication for the purpose of the Contract except in relation to any notice of termination (which should be sent by prepaid special delivery post or delivered by hand in accordance with Clauses 32.1.1 and/or 32.1.2).

#### 33. CLIENT'S instructions

The SERVICE PROVIDER shall comply with all instructions issued by the CLIENT in connection with this Contract, including the modification of, or alteration to, the Ordered Services or alteration to the scope or content of the Project. All instructions shall be in writing, except where the CLIENT considers that there is an emergency, in which case instructions may be given verbally. Verbal instructions shall be immediately effective in accordance with their terms, but shall be confirmed in writing by the CLIENT to the SERVICE PROVIDER within 4 (four) Working Days.

### 34. Change to Ordered Services

The CLIENT may, at any time, instruct a change in the Ordered Services. Where the CLIENT requires a change in the Ordered Services, the SERVICE PROVIDER shall provide the CLIENT with an estimate of the additional or reduced fees which shall be calculated in accordance with Clause 43 (Payment for changed Ordered Services and variations).

#### 35. Fees

- 35.1 Unless otherwise set out in the Order the SERVICE PROVIDER shall be entitled to submit invoices each month in respect of Ordered Services properly performed during the preceding month. The SERVICE PROVIDER shall ensure:
  - 35.1.1 the fee reflects the Ordered Services properly performed in the preceding month; and
  - 35.1.2 the fee is calculated in accordance with the fees and/or percentage quoted against each stage, or proportion thereof as relevant, by the SERVICE PROVIDER in the Fee Schedule; and
  - 35.1.3 the invoice includes evidence of the relationship to the stage payments included in the Fee Schedule;
  - 35.1.4 the invoices states whether the invoice is interim or final in relation to that stage; and
  - 35.1.5 the invoice is accompanied by an updated Fee Schedule.
- 35.2 Prior to the submission of the SERVICE PROVIDER'S first invoice, the SERVICE PROVIDER shall submit to the CLIENT an estimate of the amount of fees likely to be claimed on a month by month basis covering the whole of the Ordered Services to be performed under this Contract up to a stated estimated completion date for the Ordered Services. Subsequently, an updated estimate shall accompany each further invoice submitted in accordance with Clause 35.1, irrespective of the basis of the fee. The SERVICE PROVIDER shall also submit such further information which the CLIENT may reasonably require in order to substantiate the amount claimed.

#### 36. Payment

- 36.1 The CLIENT shall pay the SERVICE PROVIDER for Ordered Services satisfactorily performed, such sum or sums to be calculated in accordance with this Contract.
- 36.2 Fee invoices shall be submitted in accordance with Clause 36 (1) above and the fee shall become due and final 30 days after receipt of a valid invoice by the CLIENT.
- 36.3 Not later than five days after the date on which a payment becomes due, or would have become due if the SERVICE PROVIDER had carried out his obligations under the contract, and no set-off or abatement was permitted by

reference to any sum claimed to be due under one or more other contracts, the CLIENT shall give notice specifying the amount (if any) of the payment made or proposed to be made, and the basis on which that amount was calculated.

36.4 If the amount of any fees or disbursements becoming due hereunder is wrongfully withheld after the relevant final date for payment, such amount shall bear simple interest at the rate of 2% over Bank of England base rate for the time being, from the final date for payment to and including the date on which such amount is paid or discharged. The parties agree that this clause constitutes a substantial remedy for the purposes of the Late Payments of Commercial Debts Act 1998.

#### 37. Notice of Intention to withhold

Not later than the date on which payment becomes due the CLIENT may give written notice to the SERVICE PROVIDER which shall specify any amount proposed to be withheld and/or deducted from the invoice, the ground or grounds for such withholding and/or deduction and the amount of the withholding and/or deduction attributable to each ground.

### 38. Right to suspend for non-payment

- 38.1 Without prejudice to any other right or remedy of the SERVICE PROVIDER, where a sum due under the Contract is not paid in full by the final date for payment as required by this Contract, and no effective notice to withhold payment has been given under Clause 37 (Withholding payment), and such failure continues for 7 days after the SERVICE PROVIDER has given to the CLIENT written notice of its intensions to suspend the performance of his obligations under the Contract and the ground or grounds on which it is intended to suspend performance, the SERVICE PROVIDER may then suspend such performance until payment in full occurs.
- 38.2 Any period during which performance is suspended in pursuance of the right conferred by this Clause shall be disregarded in computing, for the purposes of any contractual time limit, the time taken by the party exercising the right or by a third party to complete any work directly or indirectly affected by the exercise of the right. Where the contractual time limit is set by reference to a date rather than a period, the date shall be adjusted accordingly.

#### 39. Payment following termination and consequences of termination

39.1 In the event of the SERVICE PROVIDER'S employment being terminated in accordance with Clause 45 or in the event of the Contract being terminated in accordance with Clause 46, the SERVICE PROVIDER shall only be entitled to fair and reasonable fees for partial Ordered Services satisfactorily performed together with any fair and reasonable expenses incurred in the provision of the Ordered Services; save that

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- 39.1.1 the total amount payable to the SERVICE PROVIDER under the terms of this Clause shall in no event exceed the amount which would have been payable to the SERVICE PROVIDER had he completed either the whole or, if applicable, a part of the SERVICE PROVIDER'S Ordered Services under the terms of this Contract; and
- 39.1.2 no expenses shall be reimbursed where the termination occurred as a consequence of any breach by the SERVICE PROVIDER of the Contract, or the grounds set out in Clause 46.2.1 46.2.5.

For the avoidance of doubt, in the event of termination under Clause 45 or Clause 46, the SERVICE PROVIDER shall have no entitlement to be paid or make any claim in respect of any loss of profit, loss of revenue or loss of contracts or otherwise.

- 39.2 Following termination of the Ordered Services in accordance with this Contract, the SERVICE PROVIDER shall deliver to the CLIENT all correspondence, reports, drawings, documents or other records used by the SERVICE PROVIDER in connection with the Ordered Services and the CLIENT may make full use of such correspondence, reports, drawings, documents or other records without further obligation to the SERVICE PROVIDER and in accordance with Clause 21 (Copyright).
- 39.3 In the event of the Contract being determined as a consequence of any breach by the SERVICE PROVIDER of the Contract, or upon the grounds set out in Clauses 46.2.1 46.2.5, then the CLIENT will be entitled to engage another contractor to complete those Ordered Services which otherwise would have been performed by the SERVICE PROVIDER under the terms of this Contract and to recover from the SERVICE PROVIDER any losses or additional costs and expenses which are attributable to such determination and/or the engagement of another contractor. In the event of determination of the Contract for any reason, the SERVICE PROVIDER shall co-operate in the transfer of the Ordered Services in accordance with the CLIENT'S instructions.

#### 40. Recovery of sums due

- 40.1 The CLIENT shall be permitted to deduct and withhold from any sum due to the SERVICE PROVIDER under this Contract any sum of money due from the SERVICE PROVIDER under either:
- 40.1.1 this contract; or
- 40.1.2 any other agreement between the SERVICE PROVIDER and the CLIENT;
- 40.1.3 any other agreement between the SERVICE PROVIDER and OGCbuying.solutions; or
- 40.1.4 any other department, office or agency of the Crown,

provided that the terms of such other agreement provide for sums of money due from the SERVICE PROVIDER under that agreement to be recovered by way of a

deduction from sums of money due to the SERVICE PROVIDER under this Contract (albeit that this Contract may not be referenced specifically under that agreement).

### 41. Payment of Sub-Contractors

Where work in connection with this Contract has been undertaken by the SERVICE PROVIDER'S Sub-Contractors, then the SERVICE PROVIDER shall pay the Sub-Contractors for those Ordered Services satisfactorily performed within 30 (thirty) Days of the SERVICE PROVIDER'S receipt of a valid invoice for those Ordered Services.

#### 42. VAT

- 42.1 All sums payable by or to the CLIENT or the SERVICE PROVIDER are exclusive of Value Added Tax ("VAT"). Where VAT is chargeable on such sums, the payer shall pay, upon production of a valid VAT invoice by the payee, such VAT in addition to such sums.
- 42.2 The SERVICE PROVIDER shall pay to the CLIENT within 7 days of the same being demanded by the CLIENT any VAT or amount in respect of VAT incurred by the CLIENT but which it is unable to recover from HM Customs & Excise which the CLIENT incurs as a result of the SERVICE PROVIDER'S failure to carry out its obligations under this Contract and the CLIENT employing another person to fulfil the same obligations. Where the CLIENT would have been unable to recover VAT if the SERVICE PROVIDER had fulfilled its obligations under this Contract then this clause shall only apply in respect of such additional amounts of or in respect of VAT which the CLIENT is unable to recover.
- 42.3 Where a party is liable to reimburse or indemnify the other party for costs incurred by that other party, the amount to be paid shall not include any VAT charged on such costs, save where the payee is unable to recover such VAT from HM Customs & Excise as input tax.

#### 43. Payment for changed Ordered Services and variations

- 43.1 Where the CLIENT has specifically instructed a change in the Ordered Services of the SERVICE PROVIDER, then the rates and prices included in this Contract may be used for the calculation of fees in respect of those changed services or, alternatively, and at the CLIENT'S sole discretion, a lump sum may be agreed between the CLIENT and the SERVICE PROVIDER. Provided always that where the Variation was as the result of the SERVICE PROVIDER'S default, the SERVICE PROVIDER shall not be entitled to any additional remuneration.
- 43.2 Where the CLIENT gives written authority to introduce variations then, to the extent that the SERVICE PROVIDER can show that the variations have involved additional expense in providing drawings, documents and/or information for which reimbursement would not be received by the payment of

other fees paid by the CLIENT, then the reasonable cost of the additional drawings, documents and/or information which the SERVICE PROVIDER is required to provide will be reimbursed to the SERVICE PROVIDER by the CLIENT.

43.3 The reimbursement of any fees and/or costs claimed by the SERVICE PROVIDER under the terms of this Clause shall be subject to the SERVICE PROVIDER providing such substantiation of the SERVICE PROVIDER'S claim as the CLIENT may reasonably require on a full "open book" basis.

### 44. Additional work by Sub-Contractors

Where the CLIENT has authorised additional Ordered Services to be undertaken and either the whole or part of those additional Ordered Services are undertaken by Sub-Contractors appointed by the SERVICE PROVIDER in accordance with Clause 49 (Sub-Contractors) then the reimbursement of the SERVICE PROVIDER will include for the additional work undertaken by Sub-Contractors in the same way as if the whole of the additional Ordered Services had been undertaken by the SERVICE PROVIDER'S own staff.

#### PARTICULAR POWERS AND REMEDIES

### 45. Suspension of SERVICE PROVIDER'S Ordered Services

By giving a minimum of seven (7) Days' notice to the SERVICE PROVIDER, the CLIENT may suspend the whole or part of the Ordered Services to be performed under the terms of this Contract. Where the whole of the Ordered Services have been suspended and the SERVICE PROVIDER has not been given instructions to resume the suspended Ordered Services within 6 (six) months from the date of such suspension, then the SERVICE PROVIDER may by notice to the CLIENT request an instruction that the suspended Ordered Services shall be resumed and, if no such instruction is received from the CLIENT within 30 (thirty) Days of such notice, the SERVICE PROVIDER shall have the right to treat the SERVICE PROVIDER'S employment under this Contract as terminated upon the expiry of the 30 (thirty) Days.

### 46. Determination by the CLIENT

Voluntary Determination by CLIENT.

46.1 The CLIENT shall be entitled at its absolute discretion to terminate the Contract at any time and for any reason by giving fourteen (14) Days' notice in writing to the SERVICE PROVIDER.

#### Determination as a result of Termination Events.

46.2 The CLIENT may at any time by notice in writing terminate this Contract as from the date of service of such notice, or a later date specified in such notice, if any of the Termination Events specified below occur. The Termination Events are:

#### 46.2.1 if the SERVICE PROVIDER:

46.2.1.1 commits an act of fraud or bankruptcy; or 46.2.1.2 has been convicted of a criminal offence relating to the conduct of its business or profession; or 46.2.1.3 has committed an act of grave misconduct in the course of its business or profession; or 46.2.1.4 has failed to comply with any obligations relating to the payment of any taxes or social security contributions; or 46.2.1.5 has made any serious misrepresentations in the tendering process for any project or matter in which the public sector has or had a significant participation; or 46.2.1.6 has failed to obtain any necessary licences or obtain or maintain membership of any relevant body; or 46.2.1.7 demerges into two or more firms, merges with another firm, incorporates or otherwise changes its legal form or there is a change of control as defined by section 416 of the Income and Corporation taxes Act 1988 (any

> such case being a "Change of Control") and, in any such Change of Control, there are reasonable grounds for the CLIENT to withhold its consent relating to the

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financial standing of the new entity through which it is proposed that the Ordered Services will be delivered or there are security concerns arising from the provision of the Ordered Services by the new entity.; or

- 46.2.2 the CLIENT has reasonable grounds to object to the SERVICE PROVIDER arising from security concerns in respect of the SERVICE PROVIDER; or
- the SERVICE PROVIDER, being an individual, or where the 46.2.3 SERVICE PROVIDER is a firm, any partner or partners in that firm who together are able to exercise direct or indirect control, shall at any time become bankrupt or shall have a receiving order or administration order made against him or shall make any composition or arrangement with or for the benefit of his creditors, or shall make any conveyance or assignment for the benefit of his creditors, or shall purport so to do, or appears unable to pay or to have no reasonable prospect of being able to pay a debt within the meaning of Section 268 of the Insolvency Act 1986, or he shall become apparently insolvent within the meaning of the Bankruptcy (Scotland) Act 1985 as amended by the Bankruptcy (Scotland) Act 1993, or any application shall be made under any bankruptcy or insolvency act for the time being in force for sequestration of his estate, or a trust deed shall be granted by him on behalf of his creditors, or any similar event occurs under the law of any other jurisdiction; or
- the SERVICE PROVIDER, being a company, passes a resolution, or 46.2.4 the Court makes an order that the SERVICE PROVIDER or its Parent Company be wound up otherwise than for the purpose of a bona fide reconstruction or amalgamation, or a receiver, manager or administrator on behalf of a creditor is appointed in respect of the business or any part thereof of the SERVICE PROVIDER or the Parent Company (or an application for the appointment of an administrator is made or notice to appoint an administrator is given in relation to the SERVICE PROVIDER or the Parent Company), or a moratorium comes into force pursuant to Schedule A1 of the Insolvency Act 1986, or circumstances arise which entitle the Court or a creditor to appoint a receiver, manager or administrator or which entitle the Court otherwise than for the purpose of a bona fide reconstruction or amalgamation to make a winding-up order, or the SERVICE PROVIDER or its Parent Company is unable to pay its debts within the meaning of Section 123 of the Insolvency Act 1986 (except where the claim is made under Section 123(1)(a) and is for an amount of less than ten thousand pounds (£10,000)) or any similar event occurs under the law of any other jurisdiction; or
- where the SERVICE PROVIDER is an unincorporated joint venture and any of the events referred to in Clause 46.2.3 or 46.2.4 occur in relation to any member of such unincorporated joint venture who is a signatory to this Framework Agreement.

- 46.3 Without prejudice to the provisions of Clause 46.2, the CLIENT may at any time by notice in writing terminate this Contract forthwith if the SERVICE PROVIDER is in material Default of any obligation under this Contract and:
  - 46.3.1 the material Default is capable of remedy and the SERVICE PROVIDER shall have failed to remedy the material Default within thirty (30) Days of written notice to the SERVICE PROVIDER specifying the material Default and requiring its remedy; or
  - 46.3.2 the material Default is not capable of remedy.
- The SERVICE PROVIDER shall promptly notify the CLIENT in writing on each occasion of the occurrence of any Change of Control specified in Clause 46.2.1.7. The CLIENT shall only be permitted to exercise its rights pursuant to Clause 46.2.1.7 for six (6) Months after service of a notice by the SERVICE PROVIDER pursuant to this Clause relative to each such Change of Control and shall not be permitted to exercise such rights where the CLIENT has agreed in advance in writing to the particular change and such change takes place as proposed.
- 46.5 For the purposes of Clause 46.2.1.7, the following shall be disregarded:
  - 46.5.1 any change in beneficial or legal ownership of any shares that are listed on a stock exchange resulting in the relevant shareholding being less than or equal to five per cent (5%) of the total issued share capital; and
  - 46.5.2 any transfer of shares or of any interest in shares by a person to its affiliate where such transfer forms part of a bona fide reorganisation or restructuring.

### 47. Dispute Resolution

Any dispute arising in relation to any aspect of this Contract shall be resolved in accordance with the dispute procedure set out in Schedule 2-10.

### ASSIGNMENT, SUB-CONTRACTORS, AND PARENT COMPANY GUARANTEE

### 48. Assignment

- 48.1 The SERVICE PROVIDER shall not, without the consent in writing of the CLIENT, sub-contract, sub-let, assign or transfer the Contract, or any part, share or interest under it. No sum of money to become payable under the Contract shall be payable to any person other than the SERVICE PROVIDER without the CLIENT'S written consent.
- 48.2 Subject to the provisions of Clause 48.5, the CLIENT shall be entitled to:
- 48.2.1 Assign or otherwise dispose of its rights and obligations under this Contract or any part thereof to any Contracting Authority; or
- 48.2.2 Assign or otherwise dispose of its rights and obligations under this Contract to any other body (including any private sector body) which substantially performs any of the functions that previously had been performed by the CLIENT:
  - provided that where such assignment or other disposal increases the burden of the SERVICE PROVIDER'S obligations pursuant to this Contract, the SERVICE PROVIDER shall be entitled to such charges as may be agreed between the CLIENT and the SERVICE PROVIDER to compensate for such additional burdens.
- 48.3 Subject to the provisions of Clause 48.5 the CLIENT shall be entitled, without the need to obtain the SERVICE PROVIDER'S consent to seek to
- 48.3.1 novate this Contract or any part thereof to any Contracting Authority; or
- 48.3.2 novate its rights and obligations under this Contract to any other body (including any private sector body) which substantially performs any of the functions that previously had been performed by the CLIENT;
  - upon such terms as the CLIENT shall propose provided that where such novation increases the burden of the SERVICE PROVIDER'S obligations pursuant to this Contract, the SERVICE PROVIDER shall be entitled to such charges as may be agreed between the CLIENT and the SERVICE PROVIDER to compensate for such additional burdens.
- 48.4 Subject to the provisions of Clause 48.5, any change in the legal status of the CLIENT such that it ceases to be a Contracting Authority shall not affect the validity of this Contract. In such circumstances, this Contract shall bind and inure to the benefit of any successor body to the CLIENT.
- 48.5 If this Contract is novated to a body which is not a Contracting Authority pursuant to Clause 48.3.1 or if a successor body which is not a Contracting Authority becomes the CLIENT pursuant to Clause 48.4 (in the remainder of this Clause 48 both such bodies are referred to as the "transferee"):
- 48.5.1 the transferee shall only be able to assign, novate or otherwise dispose of its rights and obligations under this Contract or any part thereof with the previous consent in writing of the SERVICE PROVIDER; and

- 48.5.2 The following Clauses shall be varied form the date of the novation or the date of the change of status (as appropriate) as set out below as if this Contract had been amended by the CLIENT and the SERVICE PROVIDER in accordance with Clause 34:
- in Clause 24.1.1, the first reference to "in Her Majesty's Service" shall be replaced with "employed by the CLIENT or acting on its behalf" and the second and third references to "Her Majesty's Service" shall be replaced with "the CLIENT"; and
- in Clause 24.1.2 the words "with Her Majesty's Service" shall be replaced with "with the CLIENT or any person acting on its behalf"; and
- 48.5.2.3 in clause 24.2 the words "Her Majesty's Service" shall be replaces with "the CLIENT"; and
- 48.5.2.4 Clause 40 shall be deleted.

### 49. Approval of Sub-Contractors

- 49.1 The SERVICE PROVIDER may:
- 49.1.1 upon prior written notice to the CLIENT employ any of the Approved Subcontractors; and/or
- 49.1.2 upon prior written approval of the CLIENT, which approval shall be at the discretion of the CLIENT, employ any contractors who are not Approved Sub-Contractors.
  - For the purposes of this Contract the Approved Sub-Contractors and the contractors approved in accordance with 49.1.2 shall be termed Sub-Contractors and shall be listed in Schedule 2-5 together with details of the obligations and responsibilities of each Sub Contractor in respect of the provision of the Ordered Services. Other sub contractors shall not be used to fulfil such obligations and responsibilities without the prior written approval of the CLIENT.
- 49.2 Within 7 (seven) Days of the Service Commencement Date and the CLIENT'S provisional acceptance of the list of proposed Sub-Contractors, the SERVICE PROVIDER must submit for the approval of the CLIENT, a Certificate of Professional Indemnity Insurance (if the relevant Sub-Contractor is required to have Professional Indemnity Insurance) and a Certificate of Employer's and Public Liability Insurance, all duly completed on behalf of each of the proposed Sub-Contractors.

#### 50. Sub-Contractors

The SERVICE PROVIDER shall be fully responsible for the Ordered Services undertaken by Sub-Contractors whom the SERVICE PROVIDER shall himself appoint and the SERVICE PROVIDER shall have the same responsibility for the Ordered Services undertaken by such Sub-Contractors as if such Ordered Services

had been undertaken directly by the SERVICE PROVIDER. The SERVICE PROVIDER shall further be responsible for entering into any agreements with Sub-Contractors as considered necessary and any fees or expenses claimable by those Sub-Contractors and any costs incurred by the SERVICE PROVIDER in employing those Sub-Contractors and in accepting the additional responsibilities thereby shall be deemed to be included in the SERVICE PROVIDER'S Proposals.

#### 51. Sub-Contractor warranties

In so far as it is required by the CLIENT it shall be a condition of the CLIENT'S approval of a Sub-Contractor that the SERVICE PROVIDER and the Sub-Contractor shall enter into a direct CLIENT/Sub-Contractor Agreement (Warranty) in the form specified by the CLIENT, or such other form as the CLIENT may agree; and that the ultimate holding company (if any) of the relevant Sub-Contractor shall enter into a guarantee in respect of the Sub-Contractor's obligations pursuant to such CLIENT/Sub-Contractor Agreement, in the form specified by the CLIENT, or such other form as the CLIENT may agree; and that the SERVICE PROVIDER shall deliver to the CLIENT such CLIENT/Sub-Contractor Agreement and guarantee, both duly executed, within 28 (twenty-eight) Days of the CLIENT'S approval of the relevant Sub-Contractor. If that condition is not fulfilled, the CLIENT'S approval of the relevant Sub-Contractor shall be null and void, and the SERVICE PROVIDER shall cease to employ that Sub-Contractor. The CLIENT will not enter into any other direct agreement with a Sub-Contractor.

### 52. Direct appointment of other contractors

- Where it is indicated in Schedule 2-2 that the CLIENT intends to appoint other contractors to undertake services, the CLIENT will enter into direct agreements with such contractors and will be responsible for the payment of their fees and, where possible, the names of such contractors will be stated in Schedule 2-2.
- 52.2 Where other contractors are appointed by the CLIENT, the SERVICE PROVIDER shall co-operate fully with those appointed contractors in order to ensure that production of the SERVICE PROVIDER'S drawings, design information or other relevant documents or information are fully co-ordinated with the work of the other contractors and that they meet the required programme. The SERVICE PROVIDER shall attend all meetings which may be called by any appointed contractor in connection with the Ordered Services.

### 53. Specific parent company guarantee

In so far as it is requested by the CLIENT the SERVICE PROVIDER shall, within 21 (twenty-one) Days of the Service Commencement Date, deliver to the CLIENT a specific parent company guarantee in the form set out in Schedule 2-6 from its ultimate holding company (if any).

### SPECIAL TERMS

The Contract shall be amended by the following Special Terms agreed by the CLIENT and the SERVICE PROVIDER:

#### Limitation of SERVICE PROVIDER's Liability

The maximum aggregate liability of the SERVICE PROVIDER under this Contract in respect of the Ordered Services shall not exceed Ten Million Pounds (£10,000,000) Sterling; provided that the foregoing limitation of liability shall not apply in respect of:

- any costs, expenses, losses or damages which arise out of the death or injury of any person where such death or injury is caused or contributed to by the Default of the SERVICE PROVIDER or any of its Sub-Contractors;
- (b) any liability to any third party for any loss or damage caused by the Default of the SERVICE PROVIDER or any of its Sub-Contractors;
- (c) any liability which is or ought to be covered by the public liability insurance to be effected and maintained by the SERVICE PROVIDER under Clause 16.3; and/or
- (d) any costs, expenses, losses or damages which arise out of the fraud or wilful misconduct of the SERVICE PROVIDER or any of its Sub-Contractors.

IN WITNESS WHEREOF these presents consisting of this and the [•] preceding pages together with Schedules 2-1 to 2-10 inclusive are executed as follows:

#### Signed for and on behalf of the CLIENT

By:	
Name :	
Title :	
Date:	
Signed for	and on behalf of the SERVICE PROVIDER
Ву:	
Name:	
Title:	Company Secretary / Director
Date :	

### Signed for and on behalf of the SERVICE PROVIDER

Ву:	
Name :	
Title :	Company Secretary / Director
Date :	

### **SCHEDULE 2-1**

### **INTERPRETATIONS**

The expressions set out below shall have the meanings ascribed thereto:

Definition	accommended the state of the st
Accepted risks	Means the risks of:  (a) pressure waves caused by the speed of aircraft or other aerial devices;  (b) ionising radiations or contamination by radioactivity from any nuclear fuel or from nuclear waste from the combustion of nuclear fuel;  (c) the radioactive, toxic, explosive or other hazardous properties of any explosive nuclear assembly (including any nuclear component); and  (d) war, invasion, act of foreign enemy, hostilities (whether or not war has been declared) civil war, rebellion, insurrection, or military or usurped power.
Approved Sub-	means the sub-contractors listed in Schedule 9 of the
Contractors	Framework Agreement.
AUTHORITY	means OGCbuying.solutions
Catalogue of Services	means the catalogue of services that shall be made available to the CLIENT by the SERVICE PROVIDER in electronic format. The Catalogue of Services specifies the Services available to the CLIENT under this Contract.
CLIENT Billing Address	means the customer billing address specified in Schedule 2-4 of this Contract.
CLIENT'S Representative	means the person employed in that capacity named in the CLIENT'S Requirements and appointed by the CLIENT to act on his behalf, or such other person as may be appointed in that capacity for the time being by the CLIENT.
CLIENT'S Requirements	means the CLIENT'S requirements as specified in Schedule 2-2.
Confidential Information	means any information designated as such by the party disclosing that information.
Contract	means the binding agreement, comprising the Conditions of Contract and the Schedules, incorporating any applicable Special Terms, between the CLIENT and the SERVICE PROVIDER relating to the provision of the Ordered Services resulting from the placing of an Order by the CLIENT.
Contract Manager	means the person (together with any duly authorised deputies) appointed by the SERVICE PROVIDER to act as Contract Manager in respect of this Contract or any replacement notified by the SERVICE PROVIDER to the CLIENT.
Contract Period	means the period as set out in the Order which commences on the Service Commencement Date.

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Definition	Meaning
Contract Standard	means the standard to which the Ordered Services are to be provided as set out in Clause 9.
Days	means calendar days.
Default	means any negligent act or omission, any breach of contract and/or any failure by the SERVICE PROVIDER properly to perform any of the obligations, terms and conditions of the Contract including (without limitation) any failure by the SERVICE PROVIDER to perform the Ordered Services to the Contract Standard.
Environmental Information	means the Environmental Information (Scotland) Regulations 2004 and any guidance and/or codes of
Regulations	practice issued by the Scottish Information Commissioner in relation to such regulations.
Equalities Legislation	all Legislation which makes unlawful discrimination on grounds of sex, sexual orientation, gender reassignment, age, disability, colour, race, ethnic, or national origin, religion, marital status, part time or temporary status in employment or otherwise including, without limitation, the Race Relations Act 1976, as amended by the Race Relations (Amendment) Act 2000, the Sex Discrimination Act 1975, the Equal Pay Act 1970, the Disability Discrimination Act 1995, and the Equality Act 2010.
Fee Schedule	means the schedule of rates, charges and/or percentages agreed between the CLIENT and the SERVICE PROVIDER for carrying out the Contract and as set out in Schedule 2-3.
FOIA	means the Freedom of Information (Scotland) Act 2002 and any subordinate legislation made under this Act from time to time together with any guidance and/or codes of practice issued by the Scottish Information Commissioner in relation to such legislation, together with the Scottish Ministers' Code of Practice on the Discharge of Functions by Scottish Public Authorities under the Freedom of Information (Scotland) Act 2002 and the Environmenta Information (Scotland) Regulations 2004 December 2010 SG/2010/257.
Framework Agreement	means the framework agreement between the AUTHORITY and the SERVICE PROVIDER under which the AUTHORITY has established a contractual vehicle for the provision of Ordered Services to CLIENTS.
Group	means and includes a company and every holding company of that company for the time being, and every subsidiary for the time being of every such holding company, and the terms "CLIENT'S Group" and "SERVICE PROVIDER'S Group" shall be interpreted accordingly; but while the CLIENT is a Minister of the Crown, a government department or other Crown agency or authority, the term "CLIENT'S Group" shall also include all other Ministers of the Crown, government departments and Crown agencies and authorities.

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Definition		
Holding Company	shall have the meaning given in Section 1159 of the Companies Act 2006.	
Information	has the meaning given under section 73 of the Freedom of Information (Scotland) Act 2000.	
Rights  means any and all patents, trade marks, ser copyright, moral rights, rights in a design, confidential information and all or any other in industrial property rights whether or not recapable of registration and whether subsist United Kingdom or any other part of the wo with all or any goodwill relating or attached the		
Key Personnel	means the key personnel as specified in Schedule 2-4.	
Method Statement	Means the method statements or statements included in the SERVICE PROVIDER'S Proposals.	
Month	means a calendar month.	
OGC	means the Office of Government Commerce.	
OGCbuying.solutions	means the Lords Commissioners of Her Majesty's Treasury as represented by OGCbuying.solutions being a trading fund of Her Majesty's Treasury without separate legal personality.	
Order	means an order for Ordered Services served by the CLIENT on the SERVICE PROVIDER.	
Ordered Services	means the work performed or to be performed for the CLIENT by the SERVICE PROVIDER as specified in Schedule 2-3.	
Parent Company	means any company which is the ultimate Holding Company of the SERVICE PROVIDER or any other company of which the ultimate Holding Company of the SERVICE PROVIDER is also the ultimate Holding Company and which is either responsible directly or indirectly for the business activities of the SERVICE PROVIDER or which is engaged in the same or similar business to the SERVICE PROVIDER.	
Project	means the works for which the SERVICE PROVIDER is to provide professional services in accordance with the terms of this Contract.	
Quarter	means a three (3) Month period beginning on 1st January 1st April, 1st July or 1st October.	
Requests for Information	means a request for information or an apparent request under the Code of Practice on Access to government	
	Information, FOIA or the Environmental Information Regulations.	
Schedule	means a schedule to this Contract.	
Service Commencement Date	means the date of the commencement of this Contract as specified in the Order, or such other date as is agreed between the CLIENT and the SERVICE PROVIDER.	
SERVICE PROVIDER'S Programme	means the programme to be provided by the SERVICE PROVIDER in accordance with the provisions of Clause 29.	

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Definition	A Section of Meaning		
SERVICE PROVIDER'S Proposals	means the proposals made by the SERVICE PROVIDER to the CLIENT in response to the CLIENT'S Requirements.		
Special Terms	means any terms which are additional to the Conditions of Contract, which are agreed between the CLIENT and the SERVICE PROVIDER in the Order and included in the Contract.		
Staff	Means all persons used by the SERVICE PROVIDER or any sub-contractor to perform the Ordered Services		
Statutory Requirements	means all requirements to be complied with under any Act of Parliament; any instrument, rule or order made under any Act of Parliament; or any regulation or byelaw of any local authority; or any regulation, directive or decision of the European Union having the force of law		
Sub-Contractor	means any contract or proposed contract between th SERVICE PROVIDER and any third party in respect of th provision of the Ordered Services including any Approve Sub-Contractors. The terms "Sub-Contractor" "Sub-Consultant" and "Sub-Contracting" shall be similar construed.		
Subsidiary	shall have the meaning given in Section 1159 of the Companies Act 2006.		
Working Day	means Monday to Friday inclusive, excluding English public and bank holidays.		
Year	means a calendar year.		

### SCHEDULE 2-2 CLIENT'S REQUIREMENT

### INTRODUCTION

This Schedule 2-2 specifies the CLIENT'S Requirement.

The CLIENT'S Requirement is the tasks listed in the "Description" column of the Fee Schedule.

#### **SCHEDULE 2-3**

### THE SERVICES AND THE FEE SCHEDULE

### INTRODUCTION

This Schedule2-3 specifies the Ordered Services to be provided and the corresponding Fee Schedule.

### THE SERVICES

The Services are the tasks listed in the column titled "Description" in the Fee Schedule. The Services are to be carried out as follows:

Team Organisation Chart:

### Allocation of Responsibilities

The general split of responsibilities between the technical advisory team is summarised in the following matrix:

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### Key Personnel:

The key personnel for each organisation are:

#### **Mott MacDonald Limited:**

Richard Cantlay – Lead NPD Procurement Adviser
Andrew Scott – Lead Technical Adviser / NPD Procurement Adviser
David Stillie – Lead Architectural and Technical Adviser
Andrew Duncan – Technical Co-ordinator
Kenneth Birrell – Lead Facilities Management Adviser

### **Davis Langdon LLP:**

Ken Fraser – Project Director
Kevin Bradley – NPD Procurement Director
Fraser Macquarie – Project Manager
Richard Park – Deputy Project Manager
Naomi Lillie – Project Administrator
Simon McLaughlin – Lead FM Adviser

### **Thomson Gray Limited:**

Ron Thomson – Lead Cost Consultant James Gibson – Cost Consultant Ian McLean – Cost Consultant

### **Turner & Townsend:**

Graham Walker

### Detailed Methodology:

A detailed methodology of how the Services will be delivered will be developed after appointment. This will set out in detail the approach that has been assumed in developing the fee for the Services to be delivered and will be used to agree between the SERVICE PROVIDER and the CLIENT the approach to be adopted. The detailed methodology will be based upon the split of responsibilities included in the table above and set out in more detail in the Fee Schedule.

#### Programme:

The key milestones are as follows:

Key Stage	Duration	
Appointment of TA team	Month 0	
NPD Financial Close	Month 28	
Construction Complete	Month 64	

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### THE FEE SCHEDULE

Enclosed is the Fee Schedule. The Fee Schedule is divided into the following components:

Section A sets out a fixed fee for delivering the Services which are required from the commencement of the Services up to the point of achieving financial close on the NPD procurement process. This fixed fee is not subject to change for inflation.

Section B sets out a provisional sum for delivering those Services which are required during the construction period which will be reviewed and confirmed with the CLIENT in writing prior to commencing the delivery of such Services. After 1<sup>st</sup> September 2013, this provisional sum is subject to inflation adjustment using an index to be agreed in writing with the CLIENT.

Section C sets out a provisional sum for delivering those Services which are required in relation to the development of the reference design for the Project. This provisional sum is not subject to change for inflation.

Section D sets out a provisional sum for delivering prescribed additional Services with the prior written agreement of the CLIENT. After 1<sup>st</sup> September 2013, this provisional sum is subject to inflation adjustment using an index to be agreed in writing with the CLIENT.

In relation to those parts of the Services which are the subject of provisional sums (as set out above), then unless otherwise agreed in writing by the CLIENT and the SERVICE PROVIDER, the fees for such parts of the Services shall be calculated on the basis of the Blended Daily Rates specified in the Fee Schedule (and not for the avoidance of doubt on the basis of the amount of the provisional sums themselves).

Provided always that in the event that at any time during the Contract Period the SERVICE PROVIDER or any of its Sub-Contractors enters into a framework agreement with the Scottish Futures Trust (or any successor body to the Scottish Futures Trust) or the Scottish Ministers, and the rates under such framework agreement are lower than the fees calculated in accordance with this Schedule 2-3 and/or the Fee Schedule, the fee rates under this Contract in respect of the SERVICE PROVIDER or such Sub-Contractor(s) (as the case may be) shall be reduced to reflect the lower rates under such framework agreement.

#### SCHEDULE 2-4

#### **KEY POSTS AND CONTACT DETAILS**

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### 1. INTRODUCTION

This Schedule2-4 contains details of the key personnel of both parties involved with this Contract and also relevant contact details.

2. For the CLIENT (CLIENT'S Representative):

	Name of CLIENT's RepresentativeBrian Currie
	Telephone Number:
	Fax Number:
	Email:
	CLIENT'S Billing address:
	NHS Lothian Finance Services Accounts Payable Department Pentland House 47 Robbs Loan Edinburgh EH14 1TY
3	For the SERVICE PROVIDER (Contract Manager):
J.	Name of Contract ManagerAndrew Oldfield
	Telephone Number:
	Fax Number:
	Email:

**SCHEDULE 2-5** 

**SUB-CONTRACTORS** 

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### INTRODUCTION

This Schedule 2-5 sets out the SERVICE PROVIDER'S principal Sub-Contractors and their obligations and responsibilities arising under this Contract. Other sub-contractors shall not be used to fulfil such obligations and responsibilities.

Name Obligations and Responsibilities	
Davis Langdon LLP	As set out in the section titled "Allocation of Responsibilities" included within Schedule 2-3.
Thomson Gray Limited	As set out in the section titled "Allocation of Responsibilities" included within Schedule 2-3.
Turner & Townsend	CDM Co-ordinator and as set out in the section titled "Allocation of Responsibilities" included within Schedule 2-3.].

**SCHEDULE 2-5** 

**NOT USED** 

### SCHEDULE 2-6 PARENT COMPANY GUARANTEE

OGC buying.solutions Framework Agreement No. [ ] Dated [ ]:		
Ordered Services:		
CLIENT'S Reference No:		
THIS AGREEMENT is made		
BETWEEN:		
(1) whose registered office is	at	
("the Guarantor"); and		
(2)		
of		
("the CLIENT", which term	shall include its successors and assignees).	
WHEREAS by an Agreement ("the Contract") dated [ ] and made between the CLIENT of the one part and [ ] ("the SERVICE PROVIDER") of the other part, the SERVICE PROVIDER is to execute certain services ("the Ordered Services") in accordance with the terms and conditions of the Contract.		
NOW IT IS HEREBY AGREED a	s follows:	

to the CLIENT the due and punctual performance by the SERVICE PROVIDER of all the obligations on the part of the SERVICE PROVIDER under or pursuant to the Contract ("the Terms") and (as a separate stipulation and as primary obligor) agrees that if the SERVICE PROVIDER shall in any respect commit any breach of or fail to fulfil any of the Terms, then the Guarantor will forthwith perform and fulfil in place of the SERVICE PROVIDER each and every Term in respect of which the SERVICE

The Guarantor hereby absolutely irrevocably and unconditionally guarantees

- Guarantor will forthwith perform and fulfil in place of the SERVICE PROVIDER each and every Term in respect of which the SERVICE PROVIDER has defaulted or which is unfulfilled by the SERVICE PROVIDER. The Guarantor shall be liable to the CLIENT for all losses, damages, expenses, liabilities, claims, costs or proceedings which the CLIENT may suffer or incur by reason of the said failure or breach PROVIDED THAT the
- Guarantor's liability shall not exceed the SERVICE PROVIDER'S liability under the Contract.
- The Guarantor shall be, and continue to be, liable under this Guarantee even if the Contract is or becomes for any reason not binding on, or unenforceable against, the SERVICE PROVIDER, for any reason whatsoever. No

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**Model Contract** 

1

alterations in the Contract, or in the Ordered Services, and no extension of time, forbearance or forgiveness, nor any act, matter or thing whatsoever except an express release by the CLIENT, shall in any way release or reduce any liability of the Guarantor hereunder. References to the Contract in this Guarantee shall include all amendments, variations and additions to it, whether made before or after the date hereof.

- This Guarantee shall remain in full force and effect until performance in full of the Terms, notwithstanding:
  - (a) the insolvency or liquidation of the SERVICE PROVIDER, the Guarantor or any other person;
  - (b) any disclaimer of the Contract by a liquidator of the SERVICE PROVIDER; and/or any feature of the Contract, the negotiations prior to the SERVICE PROVIDER and the CLIENT entering into the Contract, or the performance of the Contract, making if ineffective or unenforceable.
- 4 Until the Terms have been unconditionally and irrevocably performed in full the Guarantor shall not by virtue of any performance or payment made by it or otherwise:
  - be subrogated to any rights, security or moneys held or received or receivable by the CLIENT; or
  - (b) be entitled to exercise any right of contribution from any co-surety in respect of such performance and liabilities under any other guarantee, security or agreement; or
  - (c) exercise any right of set-off, retention, deduction, reduction or counterclaim against the SERVICE PROVIDER or any such co-surety; or
  - (d) receive, claim or have the benefit of any payment, distribution, security or indemnity from the SERVICE PROVIDER or any such co-surety; or
  - (e) unless so directed by the CLIENT (when the Guarantor will prove, and turn over any realisations to the CLIENT, in accordance with such directions) claim as a creditor of the SERVICE PROVIDER or any such co-surety in competition with the CLIENT.
- No delay or omission of the CLIENT in exercising any right, power or privilege hereunder shall impair such right, power or privilege or be construed as a waiver of such right, power or privilege nor shall any single or partial exercise of any such right, power or privilege preclude any further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies of the CLIENT herein provided are cumulative and not exclusive of any rights or remedies provided by law.

- 6 A waiver given or consent granted by the CLIENT under this Guarantee will be effective only if given in writing and then only in the instance and for the purpose for which it is given.
- 7 If at any time any one or more of the provisions of this Guarantee is or (a) becomes invalid, illegal or unenforceable in any respect under any law, the validity, legality and enforceability of the remaining provisions hereof shall not be in any way affected or impaired thereby.
  - (b) As a separate and alternative stipulation the Guarantor unconditionally and irrevocably agrees that any sum expressed to be payable by it or obligation to be performed by it under this Guarantee but which is for any reason (whether or not now existing and whether or not now known or becoming known to the Guarantor) not recoverable from or enforceable against the Guarantor on the basis of a guarantee shall nevertheless be recoverable from or enforceable against the Guarantor as if the Guarantor were the sole principal debtor or obligor (where relevant).
- 8 Any notice, demand or other communication to be served under this Guarantee may be served upon either party hereto only by posting by first

transmission to the party to be served at its ac shown below:	,
CLIENT:	Guarantor:
Fax:	Fax:
or at such other address or number as it may writing to the other party.	from time to time notify in

- 9 A notice or demand served by first class post shall be deemed duly served on the second business day after the date of posting and a notice or demand sent facsimile transmission shall be deemed to have been served at the time of transmission unless served after 5.00 p.m. in the place of intended receipt in which case it will be deemed served at 9.00 a.m. on the following business day. For the purposes of this paragraph "business day" means a day on which commercial banks are open for business in London.
- 10 In proving service of any notice it will be sufficient to prove, in the case of a letter, that such letter was properly stamped or franked first class, addressed and placed in the post and, in the case of facsimile transmission, that such facsimile was duly transmitted on a business day to a current facsimile number of the addressee at the address referred to above.
- The CLIENT shall be entitled to assign or transfer all or any of the CLIENT'S 11 rights under this Guarantee without consent of the Guarantor.

- Nothing in this Guarantee confers or purports to confer any right to enforce any of its terms on any person who is not a party to it (except any successor or any permitted assignee of such a party).
- The proper law of this Guarantee shall be the same as that of the Contract. Where the proper law of this Guarantee is Scots law, the parties prorogate the non-exclusive jurisdiction of the Scottish courts.

**IN WITNESS** whereof these presents are executed as follows:

[Testing clause or appropriate signing blocks to be inserted into engrossment in usual Scots law manner]

### **SCHEDULE 2-7**

SERVICE PROVIDER'S CERTIFICATE	OF EMPLOYER'S	<b>AND PUBLIC</b>	LIABILITY
INSURANCE			

OGCbi	uying.solutions Framework Agreement No. [ ] Dated [ ]:	
Ordere	ed Services:	
CLIEN	T'S Reference No:	
1	This certificate relates to a contract ("the Contract") dated [] for the provision of certain services, made between	
	of	
	("the CLIENT") and	
	("the SERVICE PROVIDER"), and is furnished to the CLIENT.	
2	Clauses 16(2) and 16(3) of the Contract require the SERVICE PROVIDER to effect and maintain employer's and public liability insurance, in an amount not less than that stated in the Contract.	
3	We certify that the SERVICE PROVIDER has complied with the above requirements by effecting and maintaining insurance as follows:-	
	Employer's Liability	
	Insured:	
	Insurers:	
	Policy No:	
	Period of Insurance: from	20[
	to	20[
	Amount Insured: £ (not less than required by the Contract)	
	Public Liability	
	Insured:	
	Insurers:	
	Policy No:	

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Period of Insurance:		from					20[]
to							20[]
Amount Insured:	(not Contract)	£ less	than	required	by	the	
Excess or Deductible: per claim		£					
SIGNED by							
for and on behalf of							
*SERVICE PROVIDER'S Insu	rance Broker/	SERV	ICE PF	ROVIDER'S	3 Insu	ırers	
Tel:							
Fax:							
Date:							20[]
*Delete inapplicable items.							

### SCHEDULE 2-9 CLIENT'S PROPERTY

- All CLIENT'S Property shall remain the property of the CLIENT and where such CLIENT'S Property is equipment, such equipment shall be used in the performance of the Ordered Services and for no other purpose without prior Approval.
- [2. The CLIENT shall be responsible for the repair or replacement of CLIENT'S Property unless the need for repair or replacement is caused by the SERVICE PROVIDER'S failure to comply with Clause 4, of this Schedule (CLIENT'S Property), or by the negligence or default of the SERVICE PROVIDER.] [Option A].
- [2. The SERVICE PROVIDER shall be responsible for the repair and/or replacement of CLIENT'S Property save where the cost of such repair and/or replacement, assessed by the CLIENT'S Representative, shall exceed the amount stated in the Abstract of particulars, in which case the CLIENT shall be responsible for such repair and/or replacement unless such repair and/or replacement was caused by the SERVICE PROVIDER's failure to comply with Clause 4, of this Schedule (CLIENT'S Property), or by the negligence and default of the SERVICE PROVIDER.] [Option B].
- [2. The SERVICE PROVIDER shall be responsible for the repair and/or replacement of the CLIENT'S Property unless the need for such repair or replacement was caused by the negligence or default of the CLIENT after the Service Commencement Date.] [Option C].
- [3. The SERVICE PROVIDER shall be responsible for his own costs resulting from any failure of CLIENT'S Property, unless he can demonstrate that the CLIENT had caused undue delay in his replacement or repair where the CLIENT was responsible for such replacement or repair.] [Delete if Option C used].
- The SERVICE PROVIDER shall maintain all items of CLIENT'S Property in good and serviceable condition and in accordance with the manufacturer's recommendations.
- The SERVICE PROVIDER shall be liable for any loss of or damage to any CLIENT'S Property save to the extent that the SERVICE PROVIDER is able to demonstrate that such loss or damage was caused or contributed to by the negligence or default of the CLIENT.
- 6. The SERVICE PROVIDER shall not in any circumstances have a lien on any CLIENT'S Property and shall take all steps necessary to ensure that the title of the CLIENT and the exclusion of any lien are brought to the attention of any third party dealing with any CLIENT'S Property.

#### **SCHEDULE 2-10**

#### **Dispute Resolution**

#### 1. SETTLEMENT OF DISPUTES

- 1.1 Any dispute or difference between the parties arising out of or relating to this Contract (a "Dispute") shall be referred, by either party, to the CLIENT'S Representative and the Contract Manager for resolution.
- 1.2 If any Dispute cannot be resolved within 10 Working Days after it has been referred under paragraph 1.1, the Dispute shall be referred to an authorised senior officer of the CLIENT and an authorised senior officer of the SERVICE PROVIDER for resolution.
- 1.3 If any Dispute cannot be resolved within 10 Working Days after it has been referred under paragraph 1.2, then the Dispute shall be further referred to mediation in accordance with the provisions of paragraph 2.

#### 2. MEDIATION

- 2.1 The procedure for mediation pursuant to paragraph 1.3 and consequential provisions relating to mediation shall be as follows:
  - 2.1.1 a neutral adviser or mediator ('the Mediator') shall be chosen by agreement between the CLIENT and the SERVICE PROVIDER or, if they are unable to agree upon the identity of the Mediator within ten (10) Working Days after a request by one party to the other, or if the Mediator agreed upon is unable or unwilling to act, either party shall within ten (10) Working Days from the date of the proposal to appoint a Mediator or within ten (10) Working Days of notice to either party that he is unable or unwilling to act, apply to the Centre for Effective Dispute Resolution ('CEDR') to appoint a Mediator;
  - 2.1.2 the CLIENT and the SERVICE PROVIDER shall within ten (10) Working Days of the appointment of the Mediator meet with him in order to agree a programme for the exchange of all relevant information and the structure to be adopted for negotiations to be held. The parties may at any stage seek assistance from the CEDR to provide guidance on a suitable procedure.
- 2.2 Unless otherwise agreed by the CLIENT and the SERVICE PROVIDER, all negotiations connected with the Dispute and any settlement agreement relating to it shall be conducted in confidence and without prejudice to the rights of the parties in any future proceedings.
- 2.3 In the event that the CLIENT and the SERVICE PROVIDER reach agreement on the resolution of the Dispute, the agreement shall be reduced to writing and shall be binding on both parties once it is signed by a duly authorised senior officer of the CLIENT and a duly authorised senior officer of the SERVICE PROVIDER.
- 2.4 Failing agreement, the CLIENT or SERVICE PROVIDER may agree to invite the Mediator to provide a non-binding but informative opinion in writing. No such invitation shall be made without the written consent of both parties. If it is agreed that such an invitation shall be made, the opinion shall be provided on a without prejudice basis and shall not be used in evidence in any

- proceedings relating to this Contract without the prior written consent of both parties.
- 2.5 The CLIENT and the SERVICE PROVIDER shall each bear their own costs in relation to any reference made to the Mediator and the fees and all other costs of the Mediator shall be borne jointly in equal proportions by both parties unless otherwise directed by the Mediator.
- 2.6 Work and activity to be carried out under this Contract shall not cease or be delayed during the dispute resolution process set out in paragraph 1 and this paragraph 2.
- 2.7 In the event that the CLIENT and the SERVICE PROVIDER fail to reach agreement in the structured negotiations within forty (40) Working Days of the Mediator being appointed, or such longer period as may be agreed, then the Dispute may, subject to the agreement of both parties, be referred to arbitration in accordance with the provisions of paragraph 3 and failing such agreement, may be referred to the Courts in accordance with paragraph 4.

#### 3. ARBITRATION

- 3.1 In the event that a Dispute is not resolved pursuant to paragraph 2 (or, where the matter has been referred to adjudication, under paragraph 5), the parties may, if they both agree, refer the matter to arbitration in accordance with this paragraph 3.
- 3.2 The party seeking to initiate the arbitration shall give a written Notice of Arbitration to the other party. The Notice of Arbitration shall
  - 3.2.1 state that the Dispute is referred to arbitration;
  - 3.2.2 state the particulars of this Contract; and
  - 3.2.3 provide a brief summary of the subject of the Dispute.
- 3.3 Unless otherwise agreed in writing by the CLIENT and the SERVICE PROVIDER, the provisions of the Arbitration (Scotland) Act 2010 shall govern the arbitration commenced pursuant to this paragraph 3.
- 3.4 Any Dispute, if referred to arbitration in accordance with this paragraph 3, shall be resolved by arbitration under the Arbitration (Scotland) Act 2010.
- 3.5 It is agreed between the CLIENT and the SERVICE PROVIDER that for the purposes of the arbitration, the arbitrator shall not have the power to make provisional awards.
- 3.6 For the avoidance of doubt it is agreed by the CLIENT and the SERVICE PROVIDER that the arbitration process and anything said, done or produced in or in relation to the arbitration process (including any awards) shall be confidential between the parties, except as may be lawfully required in judicial proceedings relating to the arbitration or otherwise. No report relating to anything said, done or produced in or in relation to the arbitration process may be made to any body other than the tribunal, the CLIENT and the SERVICE PROVIDER, their legal representatives and any person necessary to the conduct of the proceedings, without the agreement of all parties to the arbitration.
- 3.7 The arbitration proceedings shall take place in Edinburgh and in the English language and the arbitration proceedings shall be governed by, and interpretations made in accordance with, Scots law.

- 3.8 The CLIENT and the SERVICE PROVIDER shall each bear their own costs in relation to any reference made to the arbitrator and the fees and all other costs of the arbitrator shall be borne jointly in equal proportions by both parties unless otherwise directed by the arbitrator.
- 3.9 In the event that the CLIENT and the SERVICE PROVIDER do not agree to refer the matter to arbitration, then any Dispute may be referred to the Courts in accordance with paragraph 4.

#### 4. LEGAL PROCEEDINGS

Subject to paragraphs 1-3, this Contract shall be subject to the exclusive jurisdiction of the Scottish Courts to which both parties hereby submit.

#### 5. ADJUDICATION

- 5.1 The provisions of paragraphs 1 4 above shall be without prejudice to either party's right to refer any Dispute to adjudication in accordance with the provisions of this paragraph 5.
- 5.2 The CLIENT or the SERVICE PROVIDER may at any time notify the other of intention to refer a Dispute arising under, out of, or relating to, the Contract to adjudication. Within 7 Days of such notice, the Dispute may by further notice be referred to an adjudicator to be nominated by the Law Society of Scotland. Subject only to paragraph 5.5, both the CLIENT and the SERVICE PROVIDER shall accept any such nomination as final and binding.
- 5.3 The notice of referral shall set out the principal facts and arguments relating to the Dispute. Copies of all relevant documents shall be enclosed with the notice. A copy of the notice and enclosures shall at the same time be sent by the party giving the notice to the other party.
- If the person nominated as the adjudicator by the Law Society of Scotland is unable to act, or fails to provide the notification required by paragraph 5.5, or ceases to be independent of the CLIENT or the SERVICE PROVIDER, he shall be replaced by another adjudicator also to be nominated by the Law Society of Scotland. Again, and subject only to paragraph 5.5, both the CLIENT and the SERVICE PROVIDER shall accept any such further nomination as final and binding.
- 5.5 It shall be a condition precedent to the appointment of an adjudicator that he shall notify both parties that he will comply with this paragraph 5 and its time limits.
- The adjudicator shall be appointed within 7 Days of the giving of a notice of intention to refer a Dispute to adjudication under paragraph 5.2. Any replacement adjudicator nominated in accordance with paragraph 5.4 shall likewise be appointed within 7 Days of the need for such a replacement having become apparent. For all such appointments, the form of adjudicator's appointment shall be the Model Form of Adjudicator's Appointment as set out in "GC/Works/5 Model Forms (1998)". A copy of each such appointment shall be supplied to each party. No such appointment shall be amended or replaced without the consent of both parties.
- 5.7 The CLIENT AND THE SERVICE PROVIDER may submit representations to the adjudicator not later than 14 Days from the receipt of the notice of referral.
- 5.8 The adjudicator shall notify his decision to the CLIENT AND THE SERVICE PROVIDER not earlier than 14 and not later than 28 Days from the receipt of

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the notice of referral, or such longer period as is agreed by the CLIENT and the SERVICE PROVIDER after the Dispute has been referred. The adjudicator may extend the period of 28 Days by up to 14 Days, with the consent of the party by whom the Dispute was referred. The adjudicator's decision shall state how the cost of the adjudicator's fee or salary (including overheads) shall be apportioned between the parties, and whether one party is to bear the whole or part of the reasonable legal and other costs and expenses of the other relating to the adjudication. Where the adjudicator apportions liability to each party (whether in equal or some other proportion) in relation to the payment of the adjudicator's fee or salary (including overheads), the liability of each party shall be limited to the amount apportioned to it by the adjudicator.

- 5.9 The decision of the adjudicator is binding until the Dispute is finally determined by legal proceedings, by arbitration (if the parties agree to arbitration under paragraph 3.7) or by agreement and the parties do not agree to accept the decision of the adjudicator as finally determining the Dispute.
- 5.10 The adjudicator shall act impartially.
- 5.11 The adjudicator may take the initiative in ascertaining the facts and the law.
- 5.12 If requested by one of the parties to the dispute, the adjudicator shall provide reasons for his decision. Such requests may only be made within 14 Days of the decision being notified to the requesting party.
- 5.13 The adjudicator shall not be liable for anything done or omitted in the discharge or purported discharge of his functions as adjudicator, unless the act or omission is in bad faith. Any employee or agent of the adjudicator is similarly protected from liability.

### Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France



#### **ACTION NOTES**

Meeting

RHSC & DCN Project Working Group

Title:

**Date/Time:** Thursday 2 June 2011, 11.00 – 13.00

**Location:** Meeting Room 1, Waverlygate

Attendees: Brian Currie, Project Director (NHSL)

lain Graham, Director of Capital Planning and Projects (NHSL)

Carol Potter, Associate Director of Finance (NHSL)

Graham Gillies, Capital Planning, Project Manager (NHSL)

Donna Stevenson, SFT Andrew Bruce, SFT Gordon Shirreff, SFT

Richard Cantley, Motts Macdonald Kevin Bradley, Davis Langdon

**Apologies** Susan Lloyd, Partnership Lead (NHSL)

Mike Baxter, SGHD

### **NOTES**

tem		Lead
1.	Apologies	
	Apologies noted	
2.	Consort letter re Key Enabling Requirements for the project.	
	IG presented the letter signed off by Chief Executive to DS, letter to be sent out 2 June 2011.	IG
3.	Governance	
	Finalised F&PR paper had been submitted.	
	DS had comments regarding paper:	
1		
	Comment1 - Regarding programme DS advised that Consort would have to have all lenders around the table to obtain consent.	
	SFT clarified that SGD will <u>Not</u> allow procurement to proceed following NHSL Board approval ( as previous notes), but will endeavour to bring forward SCIG approval to facilitate this.	-

[PAGE ]

### Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France



ACTION NOTES

Item		Lead
	BC advised that the aforementioned would affect the programme; it was advised that ministerial approval could take 6 – 8 weeks. The OBC was due to be presented to CIG on 15 November 2011, but there was scope to bring forward. DS advised that MB would seek to put in place actions to move OBC process on.  BC advised that regarding the programme; 1st interim cost check July 2011, Planning in Principle may not be in place before OBC submission in November, would letter of comfort from Council (dialogue with Council) for OBC be sufficient? Planning in Principle process requires review & revision of various previous reports & arch design to 1:50 stage. Probable submission late July with 4 months planning process. Massing, height restrictions & helipad.  DS reminded all present that Planning in Principle was an essential component of OBC.  DS advised that SFT would discuss with SCIG. Approval subject to PPP with SGHD.  There were several comments from the group regarding planning in principle including: a precedent was set that previous OBC had not included; How would market view if no Planning in Principle; cost implications if Planning changed; planners will try to be flexible, could be through earlier, but for programme stick to 4 months; flood issues resolved, early consultation required; late July date is viable.  At present no indications from Council on height restriction will come when plans submitted.	DS
	BC Review of CPAM dispensation view by CSC being undertaken by Montagu Evans action BC.	вс
	Comment 2 – DS advised that reference to quantitive & qualitive terms should come out as CPAM is not included.	IG
	PQQ issue will now be Nov following CIG approval. CP advised that if date for CIG is NOV we need to put pressure on to ensure dates.	IG
	IG stated that NHSL governance programme would be from Sept – Nov. Commence dialogue April.	

[PAGE ]

### Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France



**ACTION NOTES** 

Item		Lead
4	Procurement strategy/options	
	Refer to attached paper.	
	The attached paper was tabled & discussed at length by all parties present. Following detailed consideration of the advantages & disadvantages of each of the options a collective view was formed on the most appropriate level of design prior to dialogue & hense procurement strategy. Option A was selected & agreed as the favoured route and is to be adopted by the project team as the basis of the development of a revised strategic programme.	
	BC to have dialogue with Nightingales/BMJ re their role as technical advisers and not solely reference designers. This now requires them not to be part of any bid team.	ВС
	Post Meeting Note:	
	NHSL's COO, Jackie Sansbury has requested that a further option (D) be considered as part of this process and that all costs to NHSL be identified in each of the options. A revised paper is to be prepared for review. Note: the project team are nevertheless to proceed with the adoption of option A.	RC
	DATE & TIME of NEXT MEETING	
	9 June 2011, 14.00-16.00hrs, Meeting Room 3 Waverley Gate	* — ·

Contract Control Order No 290961/02 Title Initial Appointment of Ref Design Team Dated 11 July 2011



**Project Title** 

NPD Project for RHSC/DCN at Royal Infirmary Edinburgh for NHS Lothian

### Source of Change

Appointment of Reference Design Team in accordance with attached scope and programme. (DL input outlined in attachment to be subject to separate Control Order.

### Description and Reason for Control Order

Instruct expenditure from Section C Reference Design (Provisional Sums) in accordance with Clause 34 of the Contract to permit the full appointment of the Reference Design Team consequent upon Contract Control Order No 01. The Reference Design Team will comprise; Nightingale Associates, BMJ Architects, Hulley & Kirkwood and Arup and will be appointed direct to Davis Langdon

#### **Consequential Changes**

There are no consequential changes save that work on the Reference Design will continue to completion. A further Contract Control Order will be issued in regard to the remainder of the Reference Design Provisional Sum. (DL/MML/TG/TTPM input).

#### Effect on Programme / Schedule

None

Cost Summary (based on Schedule 2-3 of the Contract – Services and Fee Schedule)

	Estimated change in Labour Costs:			
	Estimated change in Direct Costs:			
	Estimated change in Total Costs:		£1,539,486	CCO No 02
	New estimated total project Costs:	Section A	£1,370,292	Original Fixed Price Agreed
	(Currently all as contract.)	Section B	-	
	yment for changed Ordered Services and	Section C	£1,539,486	CCO No 02
Variatio	ons to be in accordance with Clause 43 of the Contract	Section D	-	
Additional A variation This Contr and details	rol Order is considered to comprise:  Work Cla	record. Plea	omments in wri	hold turn one copy. Further information
	Mott MacDonald Limited		for NHS Lothia	n
		3		
	2	#: %:		
Distribution	on: NHSL (PD,PM); Relevant Sub Consult	ants: MMI (F	PD PM PPW R	elevant Staff, PiMS CC)



RHSC + DCN Little France | Reference Design

Value for Money Statement



#### Introduction

The following document has been prepared to highlight the actions undertaken in association with the appointment of the Reference Design Team members, notably;

- Nightingale Associates (Concept Architects)
- BMJ Architects (Clinical Architect)
- Hulley & Kirkwood (Services Engineer)
- Arup (Civils, Structural, Traffic and Transportation, Acoustics and Fire Engineering)
- Tribal (Health Planners)

Each of these organisations were invited to submit **lump sum** fee proposals for their individual services based on the NHS Lothian Reference Design Deliverables document dated 22 March 2010. This document has been updated since to incorporate various amendments (Copy attached in Appendix A)

In addition to the Reference Design Deliverables document, each organisation was asked to include for the services included in the scoping documents (copies attached in Appendix B).

Each organisation was requested to base their costs on the agreed HfS hourly rates (already proven to be VFM under the HfS framework) with a further discount factor applied to same as they were not subject to competition.

#### **Fee Submissions**

The following table highlights the level of fees originally submitted by each of the design organisations.

	HAK	Arup	Nightingale Associates	BMJ	Davis Langdon	. Tribal	Totali
Original Fee Submission	£337,500	£307,936	£637,175	£294,500	£311,000	£260,645	£2,148,756

The total fees exceeded the £2.0M provisional sum allowance, therefore each organisation were asked to re-assess their fee proposal and offer further discounts.

It was at this Stage that Tribal were removed from the Reference Design team control, therefore their costs were to be ignored moving forward.

The revised fees and the associated discounts offered by each of the design companies are as indicated below.

	H&K	,/Arup	Nightingale Associates	19MU	Davis Langdon	Tribali	Total
Original Fee Submission	£337,500	£307,936	£637,175	£294,500	£311,000	£260,645	£2,148,756
Agreed Fee	£300,000	£275,000	£534,500	£294,500	£311,000	03	£1,715,000
Discount	11.11%	10.70%	16.11%	0.00%	0.00%		



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Each of the reference design team members have submitted hourly resource schedules to supplement their lump sum offers. (copies attached in Appendix C)

The reference design team draw down schedules is as follows;

	H&K Drawdown	Arup Diawdown	NA Drawdown	EMU Drawdown	Davis Langdon	Roial
01 July 2011	£12,000	£20,000	£53,500	£26,621.10	£62,200.00	£174,321.10
29 July 2011	£36,000	£35,000	£60,500	£31,008.01	£31,100.00	£193,608.01
26 August 2011	£36,000	£35,000	£75,000	£46,822.09	£31,100.00	£223,922.09
30 September 2011	£36,000	£30,000	£75,000	£31,703.76	£31,100.00	£203,803.76
28 October 2011	£36,000	£35,000	£75,000	£49,482.81	£31,100.00	£226,582.81
25 November 2011	£36,000	£30,000	£67,500	£39,586.25	£31,100.00	£204,186.25
23 December 2011	£36,000	£30,000	£55,000	£39,586.25	£31,100.00	£191,686.25
27 January 2012	£36,000	£30,000	£45,000	£29,689.73	£31,100.00	£171,789.73
24 February 2012	£36,000	£30,000	£28,000	00.02	£31,100.00	£125,100.00
	£300,000	£275,000	£534,500	£294,500	£311,000	£1,715,000

### **Analysis**

The **final** reference design fee of £1,715,000 was benchmarked against typical fee levels for a project of this nature and complexity.

Typically the fee levels of for a project of this nature and complexity would equate to circa 9 – 10% of the total construction cost.

If we assume that the construction cost is circa £160M, the total fees for the project should equate to £14.4 - 16.0 million pounds.

It should be noted that the total fees will also allow for QS services. In this instance the QS services are funded separately, therefore an allowance of £1.6M has been deducted from the total fees.

Taking into account this allowance the total design fees for the project should be circa £12.8 - 14.4 million pounds.

Considering that the reference design deliverables equate to a Stage C level of design input, the fees upon completion of these works should equate to 15% of the total fee, which should roughly equate to £1.92 - 2.16 million pounds.

The final reference design fee of £1,715,000 represents a relative saving of £200,000 - 445,000 pounds.

#### Conclusion

We are of the opinion that the **final** reference design fee of £1,715,000 represents value for money to NHS Lothian based on the following;

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- The reference design teams hourly rates have been further discounted from the rates previously submitted when the
  projects was proceeding under the HfS procurement route. In addition the hourly rates under the HfS agrrements have
  been frozen from the time of initial agreement, therefore the real discounts are actually greater than indicated in this
  paper.
- The level of design being progressed on the architectural front is actually in excess of Stage C and is more comparable
  to Stage D/D+. Given that we are obtaining this enhanced level of design detail for Stage C costs then VfM is further
  evidenced.

The final reference design fee has now been agreed to cover the following documents;

- The RHSC+DCN Deliverables for Reference Design v4 June 2011 document (copy attached in Appendix A)
- Reference Design Scoping Documents (copies attached in Appendix B)
- Reference Design Programme (copy attached in Appendix D)



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Value for Money Statement



Appendix A - RHSC+DCN Deliverables for Reference Design v4 June 2011







RHSC + DCN - Little France

### AGREED DELIVERABLES FOR REFERENCE DESIGN

v 4 16 June 2011

Deliverable	Deliverable Use Categories						Tile: Wires	COLOR DE CONTROL - LA COLOR DE	Elitary State	Constitution and the second second second	Page 10 State of Stat
	Mandate and Fix Clinical Functionality	OBC Coatings	Planning and 3rd Party Consultations	Velidate Besign and Fest Against 09	Enabbling Worke Bealgn	Site Information for Bidders	Status	Notes	Lead	Output	Reference Design Teams Comment
Schedules of Accommodation	~	1					Mandalory	icilinical Functionality. To include Soft FM Spazes. Also to include the O Zone' or preferably annotated as Arrum Space or Extended Waiting Space. Orculation to be excluded for Project Co risk) but requirements (widths etc.) for elecutation to be outlined in Output Specification. Circulation links and adjacencies to be indicated in Reference Design.	Capita		Capita will lead this phase with input from H&K with regard to the plant/riser strategy/ills and communication spaces. Capita will @own@ the schedules and update with as-drawn information.
Room Data Sheets	1	1	el se				Mandalory	Clinical Functionality Designers will require to receive full ADB database at start of reference design process.	Capita		Capita will lead this phase, H&K to develop the environmental information. Capita will identify GP2/3 items with users and list in component sheets.
Equipment Schedules	1	1					Mandatory	Clinical Functionality	UMEVAN	Schedulez/Resorts (Specific regulements to be clarified)	Equipment schedules to be produced via Cedebook upon receipt of spread-off RDS and development of norm layouts and in conjunction with specific Trust equipment requirements. The reference design team will liderally any equipment that the Trust will need to provide specific manufacturer into for.
Development Control Plan + Urban Design 1:1000/1:500	1	✓	~		1	✓	Mandatory	Ctinical Functionality All relevant site wide issues to be addressed	NA/BMJ	t:1000 and 1:500 site plans indicating building footprint, road adjustments, parking layouts, access, energy centre and support facilities, blue-light/emergency appliance access, outline landscape/public realin proposals.	The reference design basis on site wide issues will include the bus, car parking, cycle route and A&E route strategies previously developed to Planning stage for the RHSC scheme, Proposals will lake account of boundaries of land under Consort control (to be defined by NHSL), servicing/waste strategies, buses and public transport requirements, sile-wide parking provisions, (tood protection plus feedback from CECI/A&DS.It is assumed that the strategy to be adopted ton public transport will be based on previously agreed designs prepared.Early specialist involvement is recommended to develop an approach for the Hei-pad design which complements all other building design considerations (see also item 35 below).
Departmental Layouts 1:500	1	1	1				Mandalory	Clinical Functionality	NA/BMJ	1 500 CAD byout plans for all levels identifying departmental adjacencies, departmental areas, and vertical circulation cores.	We anticipate 3 herations being sufficient to achieve user-sign-off, User engagement is assumed to involve a High level / strategic / heads of department interface only at this stage.
General Arrangements Plans 1:200	1	1					Mandatory	Clinical Functionality	MEKAN	1.200 CAD layou, plans for all tevels identifying room numbers, room areas (proposed and as-drawn), structural grid Integration, main service risers, vertical circulation cores, Window locations will be excluded and partition thicknesses will be standardised.	We anocipate 2 enrations of user meetings being sufficient to achieve sign-off for Sick Kids departments with 2 iterations for DCN departments.  Full user group interface at the 1:200 stage only
General Arrangement Elevations and Sections		1	1				Non-Mandalory	Required for discussion with A+DS and CEC Planning only.	NA/BMJ	Key 1:200 outline elevations and sections for main hospital building plus energy centre/support buildings. Elevations will establish general scala/form. Suggested strategies for malenal palette and fenestration to be illustrated by 30 sketches.	We recommend that in order to secure adequate support from CEC/A&DS the reference design should include some strategic studies using elevations and sections. This will also be required to enable a BREEAM pre-assessment. H&A needs the information to inform the section 6 calculations and SBEM modefing.
Generic Room Layouts 1:50	1	1					Mandalory	Clinical Functionality Quantity and Quality to be defined	NAVBMJ	1.50 layout plans indicating all futures fittings and relevant codes, corresponding from elevations, equipment schedule, area analysis,	We estimate 37 No. generic rooms will be required based on the world- already completed on the previous scheme.
Key Room Layouts 1:50	1	1					Mandatory	Clinical Functionality Actual rooms to be specified		3D isometric views can be supplied for some rooms — extent to be agreed.	
Fire Stralegy 1 200				1			Non-Mandalory	Reference Dissign Demonstrating Compliance. Supplemented in OS Design to show compliance with Bld Standards not bespoke fire reprimerced solutions. Escape strategles also to be developed. IServices imput essenual	NA/BMJ/Arup	1:200 CAO plans indicating all compartments/sub-compartments, nazard rooms, lire doors, verifical and horizontal means of escape, final exits external appliance access, Helipad requirements, Input to fire :strategy report as required.  Contribution to a strategy report (led by ARUP) as necessary.	Why is the fire strategy being included as part of the output spec? The scheme will be designed to ensure building regulation compliant is achieved as far as possible without the need to adopt a fire engineering solution. However, in order that constraints do not previous the inclusion of spaces such as the O-Zone', a degree of localized fire engineering may be required. Plans inducting compartmentation (and subcompartmentation), vertical and horizontal means of descape, hazard rooms, final exits,







### AGREED DELIVERABLES FOR REFERENCE DESIGN

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		Delive	rable U	se Ca	tegorie	S		Market State of the State of th	1.4		
Deliverable	Mandate and Fix Cilnical Functionality	OBC Coalings	Planning and 3rd Party Consultations	Validate Design and Test Against OS	Enabbilng Works Design	Site informaton for Bidders	Status	Notes	Lead	Output	Reference Design Teams Comment
Interior Design + Artwork Concepts		1		1			N/A	Output Specification	NA/BMJ	30 sketches/sketch sectional elevations of key internal spaces (puch	The development of the 1:500 and 1:200 tayouts will include
Anwork Concepts										as the O-Zone). Finishos, colour selection and signage all excluded	consideration of the key strategies for way-briding, interior design an opportunities to integrate artwork.
Wayfinding Strategy		<b>√</b>		1			N/A	Output Specification but with supporting orawings/strategy report.	NAVMJ		It is essential trust overlopment of the 1:500 and 1:200 layouts with include consideration of the key stralegies for way-linding, interior design and opportunities for artworks to ensure that these are fully integrated and not add-ons
Flexibility and expandability			1	<b>√</b>			N/A	Output Specification with flexibility clearly defined.	NA/BMJ/H&K/Arup	Client requirements to be incorporated into relevant layout plans/drawings, siste constraints imply that future expansion/extension apportunities will be extremely limited.	Reference design will need to respond to NHSL requirements for llexibility—e.g. ability to convert non-chical to clinical space, ability to merge boundaries between mosalent areas etc. Structural reference design will identify whether structural frame expansion options exist and also possible flexibility of the structure e.g. future change of use of building theorplate from admin area to clinical area etc.
Supplies, Storage, Distribution and Waste Management (Soft FM)	1	1					Mandalory	Clinical Functionality" — Ref Design to indicate space allocations, Operational policies and area schedule req to commence ref design process, NHSL Facilities and Tech Advisor to advise,	NA/BMJ/H&K/Arup	Client requirements to be incorporated into relevant layout plans/drawings.	Precise NHSL requirements to be clarified
Decontamination and Control of Infection (HAI-SCRIBE)				1			N/A	Output Specification However, operational policies and schedule of area will be required to Inform reference design and HAI-SCRIBE guidance indicates early specific team involvement.	NA/BMJ/H&K/Arup	Client requirements to be incorporated into relevant layout plans/drawings.	Precise NHSL requirements to be clarified
BREEAM				<b>V</b>			N/A	Reference Design Demonstrating Compliance. Requirement for Excellent rating be covered in OS.  Pre assessment required by reference design team.	H&K	input to BREEAM pre-assessment workshops and provision of preliminary 'evidence' as necessary.	The reference design team will contribute to any reports and attend specific workshops as necessary.
Geotechnical Site Investigation					<b>V</b>	1	N/A	Reference Design Demonstrating Compilance, Information in OS + Data Room.  Gestech and SI should be an appendix to OS.  Notional Structure only reg from reference design feam.	ARUP	Intrusive geolecchical and generalization and investigation works to the existing flood protection embankment to the woise REE site. Design, tender and supervision of Site Investigation works.	Reklated to the site wide issues which impact upon the reterence design
Decarting, Phasing.				1			N/A	Dutput Specification		No input from Reference Design Team	
Traffic Impact Assessment and Traffic Management Plan			1			1	Mandatory	Reference Design Demonstrating Compliance. Information in OS + Data Room. Also to consider traffic movement during construction.	ARUP	NA/BMJ will contribute to any reports and attend specific workshops as necessary.	The reference design site woo solution with respect to bus routes, bus stances, car parking, A&E routes, cycle routes is be as per the solutions developed for the previous RHSC scheme.
Security Strategy				1			Mandatory	To be supplemented with requirements autined in Output Spec. Estata wide reqs within OS, Reference design to capture project specific.	NA/BMJ/H&K	NA/BMJ and H&K will contribute to reports being prepared by others and attend specific workshops as necessary to develop a High Level strategic approach complementary to the building design and waylinding strategy etc.	
Construction Strategy							NA	Any restrictions / controls required to be outlined in D&C Output Spec.		No Input from Reierence Design Team	
Arch + Civ/Struct Specifications		<b>√</b>	1	1			N/A	Output Specification to deal with materials and finishes in broad terms. If efference design provides the preferred clinical solution and general indication of massing.	NA/BMJ/Arup	Design team will contribute to information being prepared by others. Assume some narrative to support outline strategies adopted in elevation studies.	Stage C Civil & Structural Engineering Report for Reference Design
Services Infrastructure Plans 1:1000/1:500		1		1	<b>V</b>	1	Mandalory	To be supplemented with requirements autlined in Output Spec. To tie in with the requirements autlined in DCP,	H&K	The site utilities infrastructure will be developed to ensure that the facility is completely autonomous	
Integration of new and existing services.		<b>V</b>		1	1	1	Mandatory	To be supplemented with requirements outlined in Output Spec. To the in with the requirements outlined in DCP.	H&K		







### AGREED DELIVERABLES FOR REFERENCE DESIGN

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		Delive	rablé U	se Ca	tegorie	s	- 0		MIN.		Charles Co.
Deliverab <b>i</b> e	Mandate and Fix Clinical Functionality		Planning and 3rd Party Consultations	Velidate Design and Test Against OS	Erabbling Works Design	Site informaton for Biddere	_ Stalus	Notes	Lead	Output	Reference Design Teams Comment
M&E Stratogy drawings and statements		1		1			N/A	(Dulput Specification with location of service connections and loadings teat Some drawings req from reference design team to support BREEAM the assessment.	H&K		
Plant Room Isyauts.		✓		1			N/A	Output Specification	H&K	We will indicate plant area on all 1:500 layouts and site plans, We will indicate a notional layout of the energy centre and service compound/VIE plant area based upon H&K advice.	We would expect the reference design to include adequate allowances for plant. Assume H&K will liaise with Capita regarding communication percentages and will also define notional plant space sizes/areas/height requirements as well as define key riser locations.
Fire Strategy Drawings 1:200		1		1			Non-Mandatory	As Fire Strategy Services input reg.			777
Energy Strategy + Schedules of Power, Heating and Cooling Leads.		1		<b>V</b>			N/A	Odupu Specification Also needed to support BREEAM pre assessment.	H&K		
Engineering Design Philosophy		1		1			N/A	Output Specification Also needed to support BREEAM pre assessment	H&K		
Lift Usage Traffic Assessments				1			Mandatory	Numbers + Adjacencies for lifts to be included in the Ref Design supplemented by information in OS.  Links to M+E, FM and Wayfinding solution.	H&K		The reference design learn will contribute to any reports and attend specific workshops as necessary.
Life Cycle expectancies.		1					N/A	Output Specification		No input from Reference Design Team	
M&E Eng Specifications				1			N/A	Output Specification		No input from Reference Design Team	*
Commissioning and Testing							N/A	Output Specification		No input from Reference Design Team	
Lighting aesthetics.							N/A	Output Specification		No input from Reference Design Team	
ICT strategy		1		1	1	1	Mandatory	Server Room locations and numbers , operational policies and area schedules req for reference design.	H&K	Client requirements to be incorporated into relevant layout plans/drawings.	Op. policies and schedules required at commencement of 1:500 stages assume Capita will flaise with NHSL and provide schedules.
Flood Risk		1			1	1		Output Specification to identify the susceptibility of the site to flooding land that the SPV will mitigate the risk in its design.	ARUP	NA/BMJ will contribute to any reports and attend specific workshops as necessary.	Reference design proposal for flood prevention.
Helipadi	1	1						Reference design to locate the helipad within general massing and have been successfully tested against aviation reqs.	NA/BMJ/Arup	Proposed sections, elevations, 3D drawings, roof plan will take account of heli-pad requirements, Layout plans will ensure integration with vertical circulation cores.	Input of specialist consultant (e.g. Peter Roveri Bona Air, recommended to ensure compliance.
CEC Planning			✓					Reference Design to incorporate output from regular dialogue with CEC Planning.	NA/BMJ	Attendance at regular dialogue meetings where scheme development will be presented. Cultimating in a formal Design Report upon which CEC/A&DS can issue their final comments.	Assume a letter of support from CEC and design review report from A&DS is NHSUs required outcome. Early engagement will determine whether any additional deliverables may be necessary in order to achieve these outcomes,
A+DS			1					Reference Design to incorporate output from regular dialogue with AADS.			
External Stakeholder Groups								Reference Design to incorporate output from regular dialogue with all appropriate stakeholders.	UMETAN	Assumed occasional meetings only with limited external stakeholders.	NHSL to confirm any engagement necessary.



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Appendix B - Reference Design Scoping Documents



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Architectural Services Deliverables

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### Reference Design Deliverables – Architectural Services

The following design deliverables are to be read in conjunction with the NHS Lothian agreed deliverables for reference design document v3 June 2011 document

### Overview

The required project outcome is the production of a reference design defined in sufficient preliminary information and expressed in drawings, reports or outline specifications such that the outcome represents a reference design solution that meets the brief, declares its design objectives, establishes the required quality and supports NHS Lothian trust's healthcare principles and philosophy.

The purpose of the Reference Design is as follows:

- · Mandate and fix Clinical Functionality that will be Mandatory for the Bidders to adopt.
- Provide information as required for the D&C Costings to be included in the Outline Business
   Case.
- Information required for the Planning Permission in Principle application
- Examine, test and verify the feasibility and validity of the reference design and clinical
  functionality proposals and test against the D&C Output Specification to determine that a
  compliant solution can be developed on the basis of the mandatory elements of the Reference
  Design.
- · Development of the design information for the Enabling Works
- · Provide general and detailed site information for use by the Bidders.

### Design activity

General obligations, external liaison (statutory bodies, external stakeholders)

- Consult CEC Planning Department about matters of principle in connection with the architectural design – including but not limited to building massing, materials, compliance with applicable statutory legislation;
- Consult A+DS about matters of principle in connection with the architectural design;
- Liaise with External Stakeholder Groups e.g. community liaison, as necessary to progress the Reference Design;
- Consult appropriate external regulatory bodies in connection with the architectural design such as aspects of the heli-pad works;

### Client liaison

- Evaluate physical, environmental, functional and regulatory constraints from clients' brief, for potential schemes.
- Visit site(s) to assess the opportunities and physical constraints afforded by the site that might influence the design philosophy or the development of the design.



Architectural Services Deliverables

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- Advise the client on the need for arrangements to be made for and define the extent of topographical surveys.
- Assess the site and brief for opportunities for sustainable design and renewable energy.
- Contribute to the Output Specification with regard to the operating and maintenance strategy including maintenance of the external fabric.
- Review and advise the client on the architectural design requirements generated by the ADB room data sheets.
- Review & comment on NHSL client technical brief and output specifications and departmental operational policy documents
- Participate in a series of structured design review meetings with NHSL User Group representatives;
- · Participate in AEDET reviews (NHS Lothian to organise and facilitate);
- Participate in HAISCRIBE Workshops (NHS Lothian to organise and facilitate);

### Team liaison

- Undertake the role of lead consultant;
- · Attend fortnightly design team meetings with the design team members;
- Discuss the potential options for the architectural design solution culminating in the preferred solution with the rest of the design team;
- Advise design team members (structural engineer, services engineer) of significant implications
  of the architectural design portion including spatial restrictions and aesthetic consideration;
- Provide architectural design contribution to the outline emergency and fire escape strategy;
- Provide architectural design information, including outline fabric specification proposals, to
  other members of the design team sufficient to enable them to carry out strategic studies and
  environmental modelling required to support the design and obtain qualitative feedback.
- Review concept design proposals for compliance with Section 6 of the Technical Standards and SHTM 07-02;
- Review CEC code for sustainable buildings in relation to energy/carbon targets to be embodied in the architectural design;
- · Prepare risk assessments for the design;
- Review the existing health and safety file (for additional construction on an existing site).
- Provide architectural design contribution to the BREEAM pre-assessment process;
- Review & comment upon mechanical engineering strategy and implications for architectural design;
- Review & comment upon structural engineering strategy and implications for architectural design;
- Provide architectural design contribution to other team member's reports as necessary.
- Provide architectural design contribution to other team member's strategy development e.g. fire
  engineering, energy use etc. as necessary.
- Provide architectural design contribution to other team member's outline specification development as necessary.

### Architectural design



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Architectural Services Deliverables

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- Receive and develop the Client's brief in order to determine the preferred architectural concept design solution (referencing and addressing the criteria of the AEDET Evolution categories: functionality, impact, build quality in order to progress the design);
- Prepare the Concept Design in sufficient detail to equate with the agreed Deliverables for Reference design document including incorporation of Outline Proposals for structural and building services systems, and including outline specifications.
- Prepare the Concept Design in sufficient detail to include consideration of the key strategies
  for: emergency and fire escape; way-finding, interior design and opportunities to integrate
  artwork; supplies, storage, distribution and waste management; Decontamination and Control
  of Infection (HAI-SCRIBE); flexibility and expandability; security; traffic management.
- Prepare the Concept Design in sufficient detail to provide information for the approximate estimate of relevant costs.

### Deliverables

Deliverables - including drawings, specifications, reports:

- 1:1000 Scale drawings sufficient to demonstrate proposed: site location; boundaries; relationship with adjoining properties and wider environs; interface with roads infrastructure - site and site environs; relationship to public/urban realm;
- 1:500 Scale drawings for all levels (including roof) sufficient to demonstrate proposed: disposition
  of departments; inter-departmental relationships and adjacencies; primary circulation (horizontal
  and vertical) and emergency escape strategy; main service cores; access roads; visitor, patient
  and staff routes; external spaces including outline landscape proposals, parking, emergency
  vehicle access, helicopter access and internal courtyard spaces;
- 1:200 Scale drawings for all levels sufficient to demonstrate: disposition of accommodation
  within each department; functional adjacencies and relationships; department relationship with
  adjacent accommodation; department circulation (horizontal and vertical) and emergency
  escape; individual room function, number and area; structural grid; outline fire separation and
  compartmentation; main service risers;
- General Arrangement Elevations and Sections including outline elevations and sections for main hospital building plus energy centre/support buildings sufficient to demonstrate: general scale/massing/form with additional information detailing outline strategies for material palette and fenestration. Output information to be tailored to provide adequate information for consultation with CEC/A&DS and to provide sufficient architectural design input to inform BREEAM pre-assessment and Technical Standard Section 6 calculations and SBEM modelling:
- 1:50 Generic and Key Room Layouts indicating all fixtures/fittings and relevant codes, corresponding room elevations, equipment schedule, area analysis. Equipment Schedules to be produced via Codebook upon receipt of signed-off RDS and development of room layouts and in conjunction with specific Trust equipment requirements;
- Outline specifications for external fabric sufficient to allow other members of the design team sufficient to enable them to carry out strategic studies and environmental modelling;

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Design Report - for CEC/A&DS comments.



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Civil & Structural Deliverables

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### Reference Design Deliverables –Civil & Structural Engineering, Transportation, Fire & Acoustics

The following design deliverables are to be read in conjunction with the NHS Lothian agreed deliverables for reference design document v3 June 2011 document

### Overview

The required project outcome is the production of a reference design defined in sufficient preliminary information and expressed in drawings, reports or outline specifications such that the outcome represents a reference design solution that meets the brief, declares its design objectives, establishes the required quality and supports NHS Lothian trust's healthcare principles and philosophy.

The purpose of the Reference Design is as follows:

- Mandate and fix Clinical Functionality that will be Mandatory for the Bidders to adopt.
- Provide information as required for the D&C Costings to be included in the Outline Business
  Case.
- Information required for the Planning Permission in Principle application
- Examine, test and verify the feasibility and validity of the reference design and clinical
  functionality proposals and test against the D&C Output Specification to determine that a
  compliant solution can be developed on the basis of the mandatory elements of the
  Reference Design.
- · Development of the design information for the Enabling Works
- Provide general and detailed site information for use by the Bidders.

### Design activity

#### CIVIL & STRUCTURAL ENGINEERING

- Advise on any physical site restrictions which may affect the civil & structural engineering options for the Works.
- Advise on the need for arrangements to be made for geotechnical investigations to the flood protection embankment. Arrange as agent for the Client when authorised by him for such investigations to be undertaken, certify the amount of any payments to be made by the Client to the persons or firms carrying out such investigations and advise on the results of such investigations.
- Prepare an outline flood protection design for the RHSC/DCN site and consult CEC Flood
  Prevention Officer as necessary on reference design proposals. Liaise with Consort as
  necessary.
- Consult with Scottish Water on foul drainage discharge for larger development and arrange as agent for the Client for updated DIA to be prepared by Scottish Water if deemed necessary.



Civil & Structural Deliverables

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- Consult with Consort and SEPA as necessary on surface water discharge proposals.
- Consider alternative outline solutions for the Works in conjunction with the Architect and other design team members.
- Input to design studies and development of outline design proposals in relation to the Civil
   Structural aspects.
- Provide an Outline Proposals Reference Design for Civil & Structural Engineering (Stage C detail) based on the 1:200 design proposals. The outline design report will define the civil & structural engineering concept using drawings, sketches and other relevant details\_but only in so far as required to check the feasibility and validity of the Reference Design.
- Input to testing the outline design proposals against planning controls and cost, programme, structural and engineering services constraints

### TRANSPORTATION

- Advise on any limitations on road and public transport access to the site, both during construction of the Works and on completion which may affect design options.
- · Provide comment and assist in the development of the site layout;
- Review the site layout in terms of how it links to the wider local area in terms of both existing and committed schemes;
- Review the NHS justification on allocated DCN parking numbers and advise on need for further work and/or surveys if required;
- Consider the requirements of all site end-users namely emergency vehicles, patients, staff, visitors, public transport (including taxis) and servicing requirements.
- Review and update the site wide solution with respect to bus routes, bus stances, car parking, and cycle routes
- Review and Update of the Transport Assessment
- Review and Update the Car Park Summary Report.
- Review and Update the Impacts of RHSC Proposals on Parking Capacity report.
- · Review and Update the Development of Transport Proposals Note.
- Update the Car Park Management Plan/ Strategy to accommodate the RHSC/ DCN proposals.
- Prepare information pack to be made available to the Bidders.

### FIRE ENGINEERING

- Provide mark ups based on the 1:500 design proposals to assist 1:500 development and to consider the progression of the 1:500 concept to ensure feasibility moving through to the 1:200 stage.
- Provide support to the project team with regards to queries and design development options.

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Civil & Structural Deliverables

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- Provide mark ups based on the 1:200 design proposals to assist 1:200 development and to consider the progression of the 1:200 concept and be used within the Outline Reference Design Fire Strategy (see next bullet).
- Provide an Outline Reference Design Fire Strategy (Stage C detail) based on the 1:200
  design proposals. The outline report will define the fire strategy concept using drawings,
  sketches and other relevant details\_but only in so far as required to check the feasibility and
  validity of the Reference Design.
- Provide a risk register to detail any items within the Reference Design that do not meet the prescriptive guidance recommendations as defined within the SHTM.
- Allowance for meeting with the Approving Authority.

#### **ACOUSTICS**

- Input to the Output Specification associated with the identification of the internal partition and door sound insulation performance requirements.
- Provide acoustic criteria for airborne and impact sound insulation, reverberation time, internal noise levels and external noise break out.
- Provide outline advice on internal wall types, external façade, helipad, service yard and energy centre.
- Provide an Acoustics\_report\_that confirms that there are no acoustic issues with the Reference Design that cannot be solved in the normal development of the scheme.

### **ENVIRONMENTAL**

 Review and update the Environmental Impact Assessment to facilitate the Planning Permission in Principle (PPP) application.

### General

- Attend regular design team meetings with the design team as required to undertake the Reference Design.
- Provide Civil & Structural, Acoustics and Transport contribution to the BREEAM preassessment process.
- Input to the update of risk identification & hazard risk register

### **Exclusions**

#### FIRE

- Modelling such as Zone Modelling, Computational Fluid Dynamics, Evacuation Modelling, Structural Fire Modelling etc.
- The preparation, or checking of detailed specifications, designs or drawings, e.g. CAD mark ups of our 1:500 and 1:200 deliverables as described above.
- Advice to specifically incorporate any features that are specifically aimed at reducing business interruption or providing property or environmental protection.
- Specific building management details or risk assessments.



**Building Services Deliverables** 

v2 - 13 June 2011

### Reference Design Deliverables - M&E Services

The following design deliverables are to be read in conjunction with the NHS Lothian agreed deliverables for reference design document v3 June 2011 document

### Overview

Provide sufficient preliminary information in relation to the works in the form of advice, sketches, reports or outline specifications.

The purpose of the Reference Design is as follows:

- Mandate and fix Clinical Functionality that will be Mandatory for the Bidders to adopt.
- Provide information as required for the D&C Costings to be included in the Outline Business
  Case.
- · Information required for the Planning Permission in Principle application
- Examine, test and verify the feasibility and validity of the reference design and clinical
  functionality proposals and test against the D&C Output Specification to determine that a
  compliant solution can be developed on the basis of the mandatory elements of the
  Reference Design.
- Development of the design information for the Enabling Works
- Provide general and detailed site information for use by the Bidders.

### Design activity

General obligations, external liaison (statutory bodies, utilities)

- Consult local authorities about matters of principle in connection with the services design of the works;
- Obtain information on the existence and extent of public utilities and record;
- Define extent of life safety systems required. ( as dictated by the fire engineering strategy compiled by Arup fire )

Client liaison (briefing, handover, surveys)

- Evaluate physical, environmental, functional and regulatory constraints from clients' brief, for potential schemes.
- · Obtain information and documents on existing services.
- Visit site(s) to assess physical restrictions that might influence the design philosophy or the development of the design.
- Advise the client on the need for arrangements to be made for and define the extent of special investigations or tests (could be intrusive or non-intrusive).
- Review and report on the condition/status of any existing services installations
- · Review options for renewable energy supplies/systems.



**Building Services Deliverables** 

v2 - 13 June 2011

- Give initial recommendations to the client in the development of an operating and maintenance strategy.
- Review and advise the client on the engineering services requirement elements contained within the ADB room data sheets
- Review & comment on NHSL client technical brief and departmental operational policy documents

Team liaison (builders work, spatial coordination, energy targeting)

- Undertake the role of non lead consultant;
- · Attend fortnightly design team meetings with the design team members;
- Discuss the potential options for the mechanical, electrical and public health schemes culminating in the preferred solution with the rest of the design team.
- Advise team members (architect, structural engineer) of significant implications (size, weight) of mechanical, electrical, public health systems including central plant.
- Agree builders' work philosophy (such as the treatment of structural openings) for principal mechanical, electrical and public health systems.
- Undertake energy strategy studies for the building fabric and engineering services to support the design - typically generic thermal simulation and 2d modelling with simplified boundary conditions to give qualitative feedback.
- Undertake generic daylight computer modelling required to support the design and obtain qualitative feedback.
- Review architect's proposals for compliance with section 6 and SHTM 07-02
- Review CEC code for sustainable buildings from energy/carbon target perspectives ( note architect needs to review this from arch perspectives )
- Prepare risk assessments for the design.
- Detailed review of existing health and safety file (for additional construction on an existing site).
- BREEAM pre-assessor input,
- BREEAM check list M&E designer credits input
- Review & comment upon fire engineering strategy and implications for M&E
- Review & comments on generic room layouts from M&E perspectives

### Mechanical design

 Determine the mechanical services system philosophies (natural / medical gases, cooling, heating, natural ventilation, mixed mode ventilation, mechanical ventilation, pneumatic tube, fire protection and automatic controls installations);

### Electrical design

 Determine the electrical systems philosophies (HV/LV power distribution, standby generation, small power, natural and artificial lighting, data, nurse call, fire alarms,



**Building Services Deliverables** 

v2 - 13 June 2011

disabled alarms/refuge, lightning protection, security, access control, external lighting lifts and containment installations)

Develop it node rooms/central comms room strategy

### Public health design

- Determine the public health systems philosophies (above ground drainage and water service installations)
- Develop soil drainage stack strategy aligned with structure to ensure vertically aligned stacks can service the drainage needs of all appliances.

### Deliverables

Deliverables - including drawings, specifications, reports

- Prepare report on building services issues as part of the reference design report, including:
  - Preliminary design parameters/criteria;
  - Indicative sketches of plantroom layouts, locations and service riser locations;
  - Outline services drawings for the reference design
  - Concept schematics for all installations clearly defining the design philosophies;
- · Provide information for early-stage whole-life cost studies.
- Provide sufficient information to allow the preparation of the outline cost plan for building services based on floor area/building type/ system assumptions.
- · Sign-off the reference design documentation.



RHSC + DCN Little France | Reference Design

Value for Money Statement



### Appendix C - Resource Schedules

Nightingals/Associates	Number of Flaurs	Rate	Total Cost
	1.054	,	2407.040.04
Principal Professional P1	1,356	£101.04 £73.36	£137,010.24 £64,850.24
Professional P1	1,260	£73.36	£92,433.60
Professional P2	1,410	£65.08	£91,762.80
Professional P3	700	£59.66	£41,762.00
Technical T1	1,065	£42.78	£45,560.70
Technical T1	1,175	£42.78	£50,266.50
Technical T2	317	£34.26	£10,860.42
Fee Proposed			£534,500.00

BMII Aratificate	Number of Hours	Falo	Total/Gost
		TANKS THE	
P(SLS)	163	£91.82	£14,966.66
P1(RGH)	932	£71.78	£66,898.96
P1(RM)	932	£63.92	£59,573.44
P1(SD)	932	£59.16	£55,137.12
P2	221	£48.54	£10,727.34
P3	0	£41.00	£0.00
T1	0	£50.34	£0.00
T2 ×	1,049	£37.20	£39,022.80
T2	1,049	£31,20	£32,728.80
Т3	1,049	£14.66	£15,378.34
Admln	0	£32.82	£0.00
Fee Proposed			£294,500.00



RHSC + DCN Little France | Reference Design

Value for Money Statement



Hullay & Kirkwood	Number of Hours	Hate	Total Gost
Michael O'Donnell - Director	650	£90	£58,500.00
David Stewart - Director	600	£90	£54,000.00
Simmy Telfer - Director	100	£90	£9,000.00
Ron Nolan -Associate	400	£66	£26,400.00
Colin Wilkie - Associate	400	£66	£26,400.00
Ian Sandford - Principal Engineer	200	£66	£13,200.00
Bruce Elrick - Breeam Professional	200	£60	£12,000.00
Jonathan McMillan - Design Engineer	400	£40	£16,000.00
Hunter Ip - Design Engineer	400	£40	£16,000.00
Alasdair Munro - Design Engineer	200	£40	00.000,83
lan Ezzi - Design Engineer	400	£40	£16,000.00
Chris Madden - Design Engineer	200	£40	28,000.00
Graeme Dean - Design Engineer	200	£40	£8,000.00
Brian Feeley - Cad Tech/Doc Control	400	£35	£14,000.00
Mike Bryan - Cad Tech/Doc Control	400	£35	£14,000.00
Fee Proposed			£300,000.00

ARUP	Number of Hours	Rate	Total Cost
The Land of the House of the Control	民族而進行政策		
Principal	398	£117.37	£46,654.58
Principal	38	£157.30	£5,898.75
Professional P1	1,323	£93.16	£123,204.10
Professional P1	50	£123.80	£6,190.00
Professional P2	350	£77.44	£27,104.00
Professional P2	150	£94.99	£14,248.50
Professional P3	300	£65.34	£19,602.00
Technical T2	300	Σ54.44	£16,332.00
Technical T3	1,150	£42.35	£48,702.50
Fee Proposed			€0.00

Program, Cost, Consultancy www.davislangdon.com www.aecorn.com

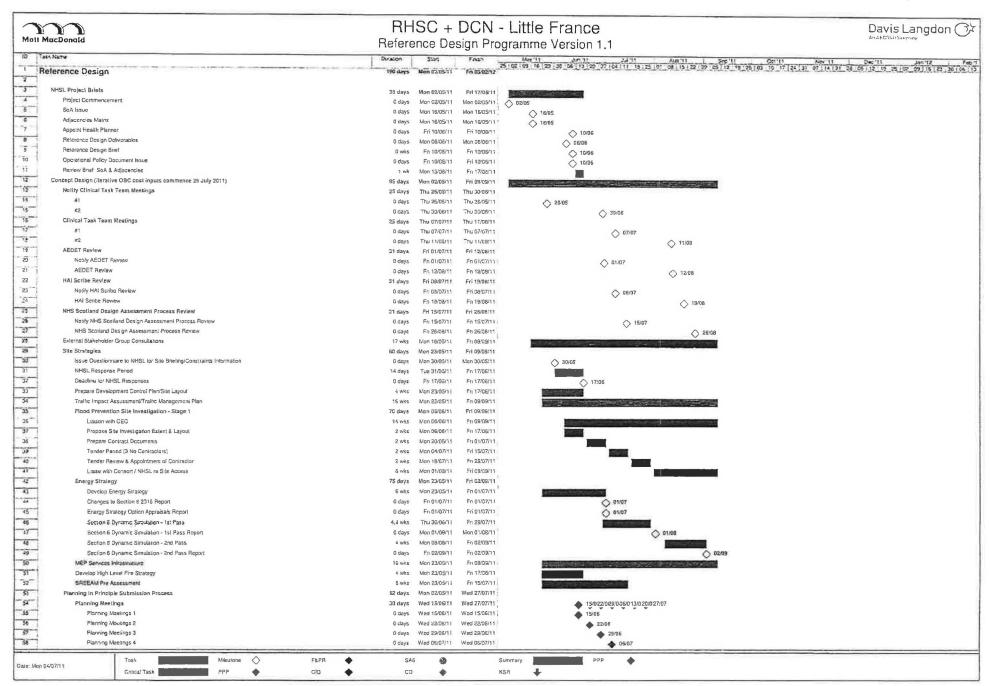


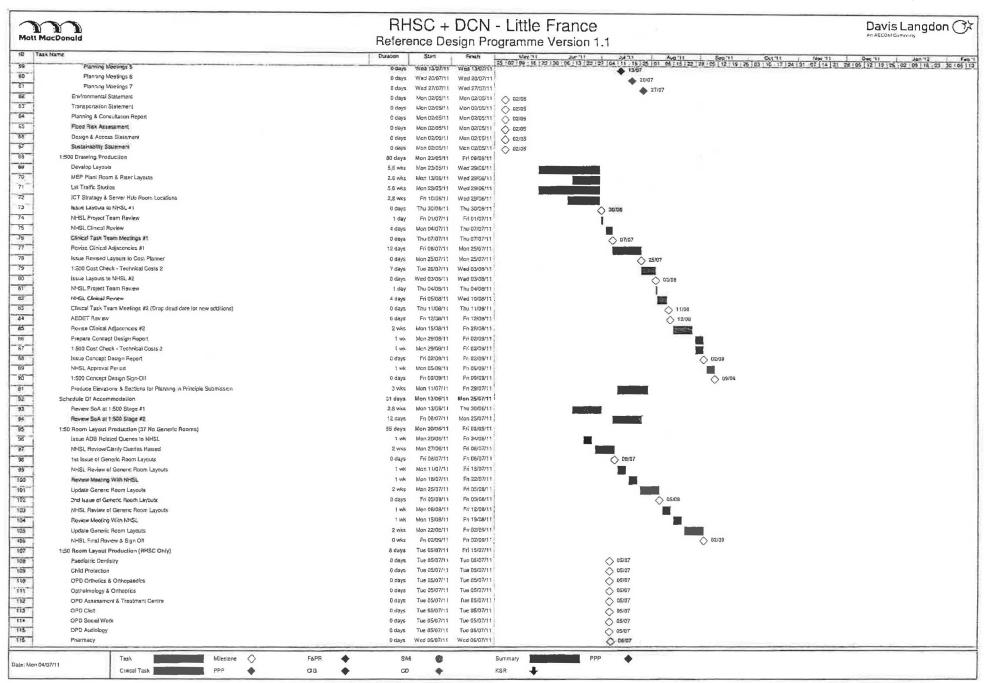
RHSC + DCN Little France | Reference Design

Value for Money Statement

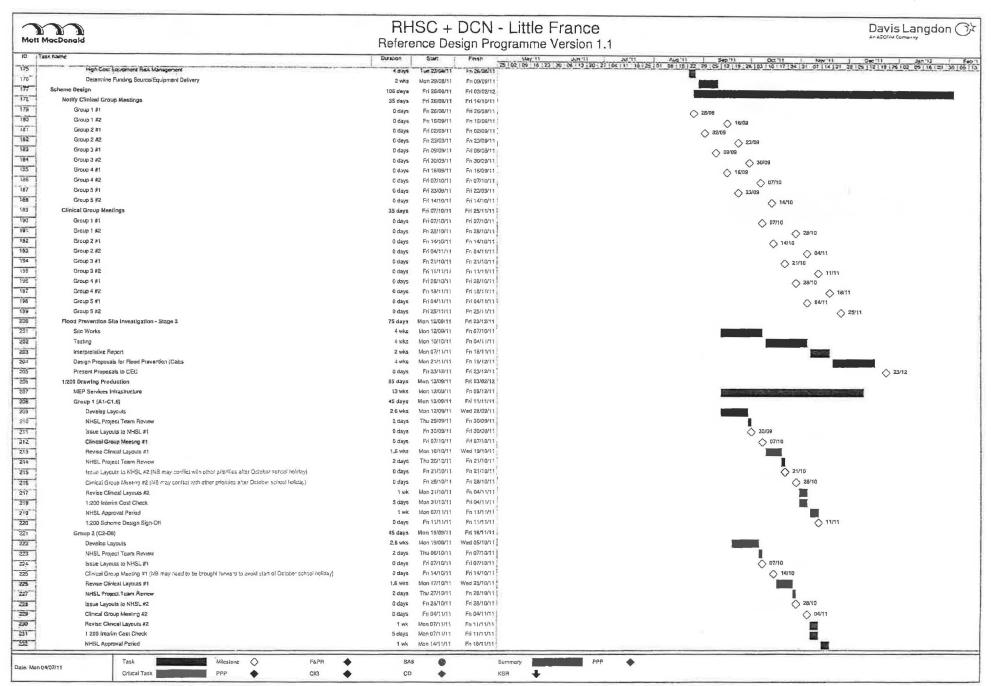


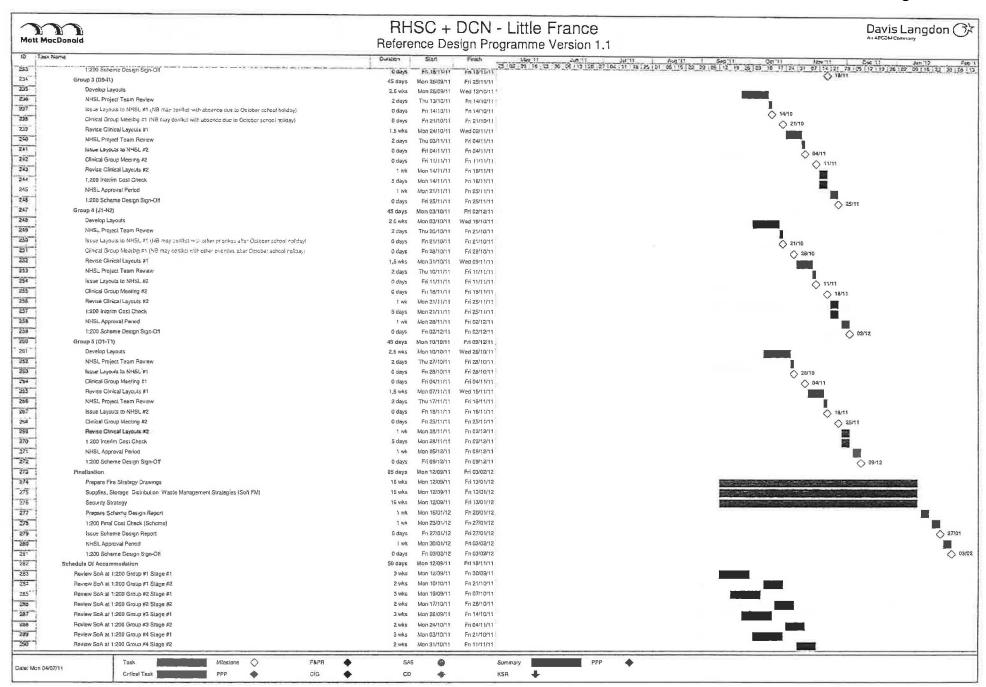
Appendix D - Design Programme





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131	On Call Suite		Mon 11/07/11	Man 11/07/11		
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		0 days	Mon 11/07/11	Mon 11/07/11		
133	Boneavement Suite	0 days	Man 11/07/11	Mon 11/07/11		
134	Spintual & Pestoral Care	0 days	Mon 11/07/11	Man 11/07/11	○ 11/07	
135	Bad Store	0 days	Mon 11/07/11	Mon 11/07/11		
135	Acute Surgical Admissions & SDCU	0 days	Mon 11/07/11	Mon 11/07/11	11/07	
157	Theatres	0 days	Mon 11/07/11	Man 11/07/11		
138	Critical Care PICU & HDU (24 bod)	0 days	Man 11/07/11	Man 11/07/11		
139	Plastics Drassing Unit	0 days	Mon 11/07/11	Mon 11/07/11		
140	Neurophysiology	0 days	Mon 11/07/11	Mon 11/07/11		
41	Sleep Lab	0 days	Mon 11/07/11	Mon 11/07/31		
142	Haerhalology/Oncology Ward	0 days	Mon 11/07/11	Mgn 11/07/11		
145	In-Palients Surgical/Adolescent	0 days	Man 11/07/11	Man 11/07/11		
145	Schools Medical/Transklonal Care	0 days	Mon 11/07/11 Mon 11/07/11	Mon 11/07/11 Mon 11/07/11		
145	In-Patients Neurosciences	0 days 0 days	Mon 11/07/11	Mon 11/07/11		
147	Health Accords	0 days	Mon 11/07/11	Mon 11/07/11	○ 11/07	
145	Clinical Research Facility	0 days	Tue 12/07/11	Tue 12/07/11	12/07	
149	Generic Room C Sheets	0 days	Tue 12/07/11	Tue 12/07/11	♦ 12/07	
150	Plot Sheets	0 days	Thu 14/07/11	Thu 14/07/11		
isi	Room Data Sheets/Equipment Reports	0 days	Frl 15/07/11	Fet 15/07/11		
152 P	Produce Equipment Lists	85 days	Mon 02/05/11	Fri 09/09/11	· ·	
51	Lead in	2.5 wks	Mon 02/05/11	Wed 18/05/11		
191	RHSC	82 days	Wed 18/05/11	Fri 09/09/11		
755	Identity Rooms To Be Deleted	C days	Wed 18/05/11	Wed 18/05/11		
SS	Review Group Codings To Identify Errors	C days	Thu 19/05/11	Thu 19/05/11	♦ 19/05	
161	Ralionaliso Equipment Descriptions	0 days	Fri 20/05/11	Fri 20/05/11		
155	Produce Pierto d 1 50 Layouta	2 2 wks	Mon 20/06/11	Mon 04/07/11		
159	NHSL Initial Sense Check	0 days	Mon 04/07/11	Mon 04/07/11 Tue 05/07/11	□ 04/07     □ 05/02	
161	Freduce Missing Roms List  Stelland Supposited Late 2 Disputer With Relation Departments	0 days 4 wks	Tue 05/07/11 Man 04/07/11	Fn 29/07/11		
161	Evaluate Summarised Lists & Discuss With Relevant Departments Compile Equipment Inventory	4 WKS 1 WK	Mon 04/07/11 Mon 01/08/11	Fri 05/08/11	<del></del> -	
163	Compile Equipment Risk Management	1 WK	Mon 08/08/11	Fn 25/08/11	<b>—</b>	
164	Determine Funding Source/Equipment Delivery	2 whs	Mon 29/08/11	Fn 09/09/11	Total State of the	
165	DCN	50 days	Fri 01/07/11	Fri 09/09/11	and the second	
66	Prepare Summary ADB Sheets/Preliminary Equipment List (Radiology)	0 days	Fr: 01/07/11	Fn 01/07/11	○ 01/07	
67	Prepare Summary ADB Streets/Preliminary Equipment List (Theatres)	0 days	Man 04/07/11	Man 04/07/11	Q4/07	
155	Provide Recommendations For Rooms Not Found Within RHSC Project Database	1 w/k	Mon 11/07/11	Frt 15/07/11		
169	Issue DCN Equipment List	0 days	Fri 15/07/11	Fri 15/07/11		
176	Produce ADB Component Sheets Based On RHSC Examples	2 wks	Mon 11/07/11	Fri 22/07/11		
175	Senso Check With Equipment Delivery Team/Compare Existing Equipment Lists With ADB Sheets	D wks	Man 25/07/11	Mon 25/07/11	♦ 25/07	
72	Departmental Meetings To Centirm Components List/Identity Missing Hems	3.8 wks	Tue 26/07/11	Fr. 19/08/11		
<u>ت</u>	Compile Equipment Inventory	1,2 wks	Fri 12/08/11	Fri 19/08/11	020000000	
72	ADB Sheels Agreed	0 days	Mon 22/08/11	Mon 22/08/11		





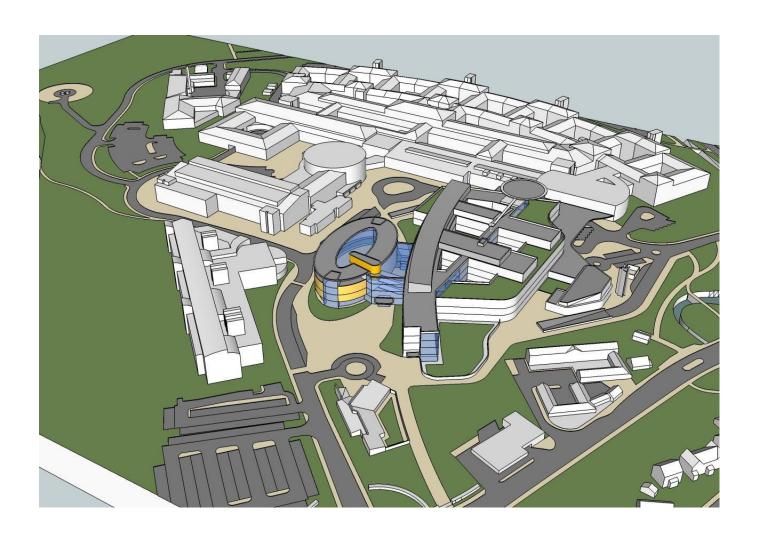
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Sione	Duration	Start	Firish (Mey 1) Jun 11 Jul   Ava 11   Sep 11 Got 11	Nov."11   Dec."11   Jan."12
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Review ScA at 1:200 Group #5 Stage #2	2 wks	Mon 07/11/11	Fil 18/11/11	
Detailed Clinical Design - Key Rooms - 1:50 (30 No RHSC / 40 No DCN)	SD days	Man 14/11/11	Fri 03/02/12	
Group 1 (A1-C1.6)	30 days	Mon 14/11/11	Fri 23/12/11	
Develop 1 50 Room Layouts	2 wks	Mon 14/11/11	Fri 25/11/11	
Issue Layouts to NHSL #1	0 days	Frl 25/11/11	Fri 25/11/11	<u> </u>
Clinical Group Meeting #1	0 days	Fri 02/12/11	Fn 02/12/11	♦ 02/12
Pense 150 Ream tayouts #1	1 wk	Man 05/12/11	Fri 09/12/11	
Lssue Layouts to NHSL #2	0 days			O9/12
Clinical Group Meeting #2	0 days			
Revise 1:50 Room Layouts #2	3 days	Man 19/12/11		
NHSL Approvat Period	2 days	Thu 22/12/11		1
1:50 Scheme Design Sign-Oil	0 days	Frl 23/12/11		
Group 2 (C2-D8)				
Develop 1:50 Room Layouls	2 wks			
Issue Layouts to NHSL #1	0 days	Fri 02/12/11	Fri 02/12/11	○ 02/12
Clinical Group Meeting #1	0 days	Fri 09/12/11	Fri 09/12/11	O9/12
Revise 1:50 Room Layouls #1	1 wk	Man 12/12/11	Fri 16/12/11	
Issue Layouts to NHSL #2	0 days	Fri 16/12/11	Fri 16/12/11 !	
Clinical Group Meeting #2	0 days	Fn 23/12/11	Fri 23/12/11	
Revise 1:50 Room Layouts #2	3 days			
NHSL Approval Period	2 days	Thu 12/01/12	Fri 13/01/12	I I
1:50 Scheme Design Stor-Off	0 days	Fn 13/01/12	Fri 13/01/12	
Group 3 (D9-11)	30 darys	Mon 28/11/11	Fri 20/01/12	
Develop 1:50 Room Layouts	2 Wks	Man 28/11/11	Fri 09/12/11	
Issue Layous to NH5L #1	D days	Fri 09/12/11	FrI 09/12/11	O9/12
Clinical Group Meeting ≠1	0 days	Fri 18/12/11	Fn 16/12/11	
Revise 1:50 Room Layouts #1	1 wk	Mon 19/12/11	Fil 23/12/11	
Issue Layous to MHSL R	0 days	Fri 23/12/11	Fri 23/12/11	
Clinical Group Mooting #2	0 days	Frl 13/01/12	Frl 13/01/12	♦ 13/01
Revise 1:50 Room Layouts #2	3 days	Mon 16/01/12	Wed 18/01/12	
NHSL Approval Period	2 days	Thu 19/01/12	Fn 20/01/12	
1:50 Scheme Design Sign-Off	O days			♦ 20/01
Group 4 (J1-N2)	30 days			
Develop 1:50 Room Layouts	2 wks		10,100	
Issue Layouts to NHSL #1	0 days	Fri 18/12/11		↑ 16/12
Clinical Group Meeting #1	D days	Fri 23/12/11		
Revise 1 50 Room Layouts #1	1 wk	Man 09/01/12		
fasue Layouts to NHSL #2	0 days	Fri 13/01/12	Fri 13/01/12	
Clinical Group Meeting #2	G days	Fri 20/01/12	Fri 20/01/12	♦ 20/01
Revise 1.50 Room Layouts #2	3 days			
NHSL Approval Period	2 days	Thu 25/01/12	Fri 27/01/12	
1:50 Scheme Design Sign-Off	0 days			
Group 5 (O1-T1)				
Devalop 1:50 Room Layouts	2 wks		Fri 23/12/11	
Issue Layouls to NHSL #1	0 days	Fri 23/12/11	Fn 23/12/11	
Clinical Group Meating #1	0 days			○ 13/01
Revise 1 50 Room Layouls #1	1 wk	Man 16/01/12		
Labur Layouts to NHSL #2	0 days	Fn 20/01/12	Fn 20/01/12	♦ 20/01
Clinical Group Meeting #2	0 days			♦_2
Revise 1:50 Room Layouis #2	3 days		Web 01/02/12	
NHSL Approval Period	2 days			
1:50 Scheme Design Sign-Oit	0 days	Frt 03/02/12	Fix 03:02/12 :	
	Provider Sch as 1:200 Group pt Stage #2  Detailed Cilinical Design - Key Rooms - 1:50 (30 No RHSC / 40 No DCN)  Group 1 (A1-C1.6)  Develop 1:50 Room Layouts  Issue Layouts to NHSL #1  Clinical Group Meeting #1  Revise 1:50 Room Layouts #2  Rivers 1:50 Room Layouts #2  Rivers 1:50 Room Layouts #2  NHSL Approval Period  1:50 Scheme Design Sign-Oil  Group 2 (C2-09)  Develop 1:50 Room Layouts #1  Issue Layouts to NHSL #1  Clinical Group Meeting #2  Revise 1:50 Room Layouts #1  Issue Layouts to NHSL #2  Clinical Group Meeting #2  Revise 1:50 Room Layouts #1  Issue Layouts to NHSL #2  Clinical Group Meeting #2  Revise 1:50 Room Layouts #2  NHSL Approval Period  1:50 Scheme Design Sign-Oil  Group 3 (D9-H1)  Develop 1:50 Room Layouts  Issue Layouts to NHSL #1  Clinical Group Meeting #1  Revise 1:50 Room Layouts #1  Issue Layouts to NHSL #1  Clinical Group Meeting #2  Revise 1:50 Room Layouts #2  NHSL Approval Period  1:50 Scheme Design Sign-Oil  Group 4 (J1-NE)  Develop 1:50 Room Layouts #2  NHSL Approval Period  1:50 Scheme Design Sign-Oil  Group 4 (J1-NE)  Develop 1:50 Room Layouts #2  NHSL Approval Period  1:50 Scheme Design Sign-Oil  Group 4 (J1-NE)  Develop 1:50 Room Layouts  Issue Layouts to NHSL #2  Clinical Group Meeting #2  Revise 1:50 Room Layouts #1  Issue Layouts to NHSL #2  Clinical Group Meeting #2  Revise 1:50 Room Layouts #2  NHSL Approval Period  1:50 Scheme Design Sign-Oil  Group 5 (O1-T1)  Develop 1:50 Room Layouts  Issue Layouts to NHSL #1  Clinical Group Meeting #1  Revise 1:50 Room Layouts  Issue Layouts to NHSL #1  Clinical Group Meeting #1  Revise 1:50 Room Layouts  Issue Layouts to NHSL #1  Clinical Group Meeting #1  Revise 1:50 Room Layouts  Issue Layouts to NHSL #2  Clinical Group Meeting #1  Revise 1:50 Room Layouts  Issue Layouts to NHSL #2  Clinical Group Meeting #1	Pervisor Spik Att   2000 Group #5 Stoge #2   2 wide   Pervisor Spice #2   2 wide   Per land collished Design - May Posson - 1:50 (29 No RHSC / 40 No DCN)   50 days	Review Sch XI   1200 Gmiss in Spaige #2   2 mbs	Process   Section   Sect





# Royal Hospital for Sick Children & Department of Clinical Neurosciences Project

### NHS Lothian



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### Document Issue

Issue:	File Path:	Date:	Prepared:	Checked:	Reviewed:
1	To be stored on BIW	01.06.2011	RP & NL	FMcQ	To be reviewed by all leads
1.1	To be stored on BIW	12.08.2011	RP	AM	Internal Review
1.2	To be stored on BIW	19.08.2011	RP	RC	Internal Review
1.3	To be stored on BIW	23.08.2011	RP	FMcQ	To be issued to NHSL for SFT Review
2.0	To be stored on BIW	06.09.2011	RP	FMcQ	To be issued to NHSL and Work-stream managers

## Schedule of Revisions

Revision:	Date:	Details of Revision:	Revised By:
Draft 1.	01.06.2011	Updated draft for review / comment	RP
Draft 2.	06.09.2011	Update to reflect feedback and project status	RP

### 1. Introduction

### 1.1 Project Name

The name of this project is Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France, Edinburgh, and is abbreviated to RHSC & DCN Little France Project.

### 1.2 Purpose of the Document

This PEP (Project Execution Plan) is intended to impart to all parties involved in the project a clear understanding of how they interact with each other, and sets out the governing strategy, organisation, control procedures and roles and responsibilities for the project i.e. how the project will be delivered. The document provides a concise introduction to the project for new team members.

It is intended that this document will be a working document, amended and further developed during the progression of the project, with revisions issued as appropriate. Davis Langdon, an AECOM Company (Davis Langdon), will be responsible for developing the document with input from the various parties of the project.

All parties involved in or associated with the project are requested to comply with the contents of this PEP. Any issues which may result in necessary amendments, amplifications or improvements to practices or procedures contained herein should be raised for discussion with all parties.

#### 1.3 Precedence of Document

If any matter within this document is at variance with any Contract or Agreement signed by NHSL Board relating to the execution of the works, then that which is contained within such Contract or Agreement will be deemed to take precedence. Any such variation should be reported to Davis Langdon such that the necessary amendments can be made.

### 1.4 Acronyms and Abbreviations

A&E	Accident and Emergency
AEDET	Achieving Excellence Design Evaluation Toolkit
CA	Company Administrator
CAMHS	Children and Adolescent Mental Health Services
CIG	Capital Investment Group
CDM	Construction Design Management
C&YP	Children and Young People
DCN	Department of Clinical Neuroscience
DL	Davis Langdon, An AECOM Company
ENT	Ears, Nose & Throat
EY	Ernst & Young
FBC	Full Business Case
MM	Mott MacDonald Limited
NES	National Education Services Scotland
NHSL	National Health Service Lothian
NPD	Non Profit Distribution
NSD	National Services Division
NSD MCN	National Services Division Managed Clinical Network
OBC	Outline Business Case
OGC	Office of Government and Commerce
PAA	Paediatric Acute Admission and Assessment Unit
PEP	Project Execution Plan
PFPI	Patient Forum and Public Involvement

PIC	Project Information Co-ordinator
PME	Project Management Executive
PSC	Professional Services Contract
RHSC	Royal Hospital for Sick Children
RDT	Reference Design Team
REH	Royal Edinburgh Hospital
RIE	Royal Infirmary Edinburgh
SFT	Scottish Futures Trust
TG	Thomson Gray Partnership
TT	Turner & Townsend

### 2. Project Introduction

#### 2.1 Background

The NHSL Property and Infrastructure Strategy published in 2007 recognised that the RHSC and DCN require significant modernisation to ensure an appropriate environment for the provision of high-quality paediatric and neuroscience services. Physical building and site constraints, together with practical phasing difficulties, limit the ability to achieve such modernisation in a successful and cost effective manner on the current respective sites.

### - RHSC

The RHSC facility rated as being 47% non-compliant with fire standards and 56% non-compliant with other statutory and non-statutory standards. 48% of the property is in an unacceptable physical condition and, in terms of functional suitability, 13% is deemed to be unfit for its present purpose. 6% of the hospital is recorded as overcrowded.

#### DCN

In February 2008 the Scottish Government endorsed the recommendation of the Neurosciences Implementation Group that adult neurosurgery continue to be provided in Aberdeen, Dundee, Edinburgh and Glasgow. <sup>1</sup> These services would be consolidated under a single management structure for Scotland; NHS Lothian is fully engaged with the national Managed Service Network for neurosurgery.

The re-provision of the Royal Hospital for Sick Children and Department of Clinical Neurosciences, within a combined facility at Little France, is a key part of the NHSL Board Strategic Capital Investment Programme. NHSL Board has decided to procure the project through the Scottish Government Non Profit Distributing model.

The new building will be located at the Royal Infirmary Edinburgh (RIE) on the Little France Site.

### 2.2 The Project Brief and Scope

### 2.2.1 RHSC Existing Facilities Overview

The Royal Hospital for Sick Children, Edinburgh, is currently based at Sciennes, near Edinburgh city centre. It was originally built in 1895 and has had several structural developments over the last 100 years. The Hospital and many of the surrounding houses, which are owned by NHSL or by NHSL Endowments, are listed buildings.

The services that at present are provided on the Royal Hospital for Sick Children site are:

Children's services provided in RHSC			
A&E	Haematology / oncology	Ophthalmology	
Ambulatory paediatrics	Inherited metabolic disease	Paediatric Liaison psychiatry / psychology	
Audiology	Paediatric Intensive Care	Paediatric Pharmacy	
Anaesthesia	Paediatric High Dependency	Paediatric physiotherapy	
Burns	Infectious diseases	Paediatric Radiology	
Cardiology (inpatient facility in Yorkhill)	Intensive Care Retrieval (NSD contract)	Paediatric Respiratory medicine	
Child protection	On-site laboratories – haematology / biochemistry	Renal medicine (outreach from Yorkhill)	

<sup>&</sup>lt;sup>1</sup> Neuroscience Implementation Group (2008): Report to Cabinet Secretary for Health and Wellbeing

Chronic pain service	Maxilo-facial surgery	Paediatric Rheumatology	
		(outreach from Yorkhill)	
Cleft lip and palate surgery (NSD MCN)	Paediatric medicine	Pain Management	
Day surgery	Neonatal surgery	Speech and language therapy	
Paediatric Dietetics	Neurosciences (neurology / neurophysiology/neurosurgery)	Paediatric general surgery	
Endocrinology & diabetes	Occupational therapy	Paediatric spinal deformity surgery	
Genetics	Oral surgery	Specialist neuro-developmental paediatrics	
Gastroenterology	Out patient services	Theatres	
Services shared with adult service but provided on-site at RHSC			
Dentistry	Neurosurgery	Orthotics	
Dermatology	Orthopaedics	Plastic surgery	
ENT			

The current 12-bed CAMHS inpatient unit is located in the Young People's Tier 4 Unit on the Royal Edinburgh Hospital (REH) site, adjacent to the regional forensic unit. It incorporates 12 single rooms in 3 groups or 'pods'. Designed around the idea of a therapeutic community, the unit imposes major constraints on staff wanting to provide modern treatment and care. In particular the current facility only has one communal area with all the bedrooms opening into this area. Privacy is therefore significantly compromised.

Day children's services are currently based at Forteviot House, Hope Terrace which comprises 2 Victorian villas which have been connected together.

### 2.2.2 DCN Existing Facilities Overview

The Department of Surgical Neurology opened in a purpose-built facility in the Western General Hospital (WGH) in 1960. It had 60 beds and two dedicated operating theatres designed by the internationally renowned neurosurgeon Norman Dott. Neurology was based at the Northern General Hospital at this time, with 30 inpatient beds.

The facility was re-named the Department of Clinical Neurosciences in 1987 when neurology moved to WGH, and then comprised 48 neurosurgery and 24 neurology beds.

In 1990 the DCN theatre complex was developed to meet Royal College of Anaesthetists standards for training and best clinical practice. The original theatres remain, with updated anaesthetics rooms, recovery beds and other support accommodation.

Until the early 1990s neurosurgical trauma was based at the Royal Infirmary of Edinburgh (RIE), with a dedicated trauma theatre, critical care facilities and inpatient ward. In 1991 these services moved into the DCN at WGH, with an overall reduction in NHS Lothian neuroscience beds of 19 and a concentration of all neurosurgery into two operating theatres.

In 1996 DCN was expanded to include a dedicated outpatients department, teaching and office accommodation. DCN now holds other outpatients' clinics in various locations on the WGH site as the ten consulting rooms are no longer sufficient.

Prior to 1997 the population served by the DCN was approximately one million, covering the Lothians, Fife and the Borders, but this has expanded considerably in the last twelve years to a base population of 1.8 million to include Dumfries and Galloway and part of Forth Valley.

The services that at present are provided on the Department of Clinical Neurosciences are:

Neurological services provided in DCN			
Chronic Pain Service	Diagnostic Neuroradiology	Dietetics	
Edinburgh Centre for Neuro- oncology	Neurosciences High Dependency Unit	Health Records	

Interventional Neurovascular	Neurology	Neurophysiology	
Radiology			
Neuropsychiatry	Neuropsychology	Neurosurgery	
Occupational Therapy	Outpatients Department	Pre-Admission Clinic	
Programmed Investigation Unit	Physiotherapy	Speech and Language Therapy	
Theatres and Anaesthesia			
Shared services provided on-site at DCN			
Neuroradiology	Neurophysiology		

### 2.2.3 Summary of Client Brief

The new combined facility will be sited at Little France. The gross floor area of the new combined build as detailed in the feasibility study is estimated at approximately 50,000 square metres. The RHSC project has an approved OBC and was based on procurement through Framework Scotland. The design for this stand-alone facility was well advanced and three rounds of user-groups meetings had been conducted resulting in the sign-off of a design to 1:50 detailed design stage (equivalent to RIBA Stage E). The DCN project is not as developed, either in terms of design or business case production. Outline design information including Schedules of Accommodation have been developed in order to support a draft OBC. As part of the Scottish Government 2010-2011 Budget announcement, the RHSC and DCN schemes were announced as forming part of the new NPD pipe-line. Consequently, clinical and building elements of the previously proposed stand-alone buildings will now be combined.

### 2.2.4 Strategic Objectives

The anticipated outcomes and benefits from the development are:

### In-patient & Ambulatory Care Services

- Co-location with acute adult, maternity and neonatal services where the support of clinicians from across different specialities will be available. The provision of a purpose-built state-of-the-art Children & Young People's (C&YP) hospital with improved facilities and an appropriate environment for children, young people, families and staff;
- An expanded 'front door' service (including a Paediatric Acute Admission and Assessment Unit (PAA) that links with primary care and unscheduled care services and therefore supports service redesign and sustaining national targets for reducing waits and delays in A&E);
- High-quality clinical care for patients that is timely, accessible and consistently available;
- Sustainable core and specialist emergency and elective service, and local, regional and national services;
- Improved planning and processes for patient transition from paediatrics to adult services leading to improved pathways of care for patients and families;
- The synergy of having co-located adult and paediatric services providing significant additional research and development opportunities for children's services;
- Support the effective delivery of teaching and education through co-location of the hospitals located at Little France, the Medical School and the Bio-medical Research Park on one site;
- Retention of children's neurosurgical service which depends on the co-location of the adult neuroscience service.

### Children & Adolescent Mental Health Services

- Improved patient care for C&YP with both mental health and physical illnesses. Physical co-location will support faster diagnosis and treatment;
- Professional benefits to CAMHS staff and paediatricians of working alongside each other, reducing the risks of professional isolation and improving the dialogue between colleagues;
- Suitably designed premises enabling staff to work effectively when treating young people with serious mental illness;
- Reduction in the stigma young people associate with mental illness by being treated on the same site as all other children and young people.

#### Department of Clinical Neurosciences

[NB Section to be developed - DCN outcomes and benefits of a combined facility not considered within draft OBC.]

### 2.2.5 Project Parameters and Key Issues

One of the key constraints of this project is that the footprint and massing of the hospital will be constrained by existing buildings, services and infrastructure on the RIE site. These include:

- Physical Link connection to the A&E department within the RIE hospital;
- Road Network potential realignment of the existing network may be necessary to maintain a workable hospital layout. The potential impact on cars, ambulance / emergency access and buses during construction will be managed;
- Utilities the proposed service strategy will be to create new independent utility supplies including drainage, water, gas, electricity and communications, with the ultimate objective of delivering an autonomously-serviced department.;
- Niddrie Burn and Other Water Courses a key constraint to the south and east of the site, together with realignment plans by City of Edinburgh Council to the east;
- Site Conditions data from the RIE development and site investigations on the adjoining land is available, suggesting restrictions in some areas;
- Car Parking the maintenance during construction and the operation of sufficient car parking will require cognisance of the neighbouring developments and planning restrictions. Fully accessible and, where appropriate, managed car parking for the RHSC / DCN patients and staff to be balanced with planning requirements (e.g. Green travel planning) and site capacity limitations. The opportunities for maximising collaboration with neighbouring developments and public transport servicing will be pursued:
- Height the current development plans include a development height restriction of three floors, based on "lines of sight" from Old Dalkeith Road and maintaining the uninterrupted ridges of Craigmillar Castle and Edmonston. The increased building foot-print and formation of an independent energy centre and service yard will extend the building constraints and ultimately breach the defined sky-line policy. This will need to be carefully managed with the City of Edinburgh Council Planning department and Architecture and Design Scotland;
- Clinical Services the clinical services at RIE require continued function and cannot be disrupted;
- Access To Existing Amenities and Public Services access to existing services on the Little France site, for patients, staff, visitors, public transport and suppliers will require to be maintained throughout the project;
- Full Planning Permission yet to be granted for the project and this may be influenced by the permissions required for the whole of the Little France future master planning of the site. This work is under way for Little France incorporating the plans for re-provision of the RHSC and DCN. This work has to be aligned to the overall master-plan for the Bio-quarter development, and is at an advanced stage. This will have to be considered in full detail in relation to the site wide traffic management strategy.

### 2.3 Project Delivery

#### 2.3.1 Overall Project Delivery

The Client has contracted Advisers to support the Project Delivery in the following way:

# RHSC & DCN NHSL Project Delivery Brian Currie Project Director Project Managers & Technical Advisers Project Managers & Technical Advisers Turner & Townsend Project Managers & Technical Advisers

Figure 1: NHSL and Advisers Project Structure

Davis Langdon, An AECOM Company Project Execution Plan Version 1 Page 216

The NHSL Delivery Team will be working alongside the Advisory Teams to delivery the project. The NHSL Team is set up as follows:

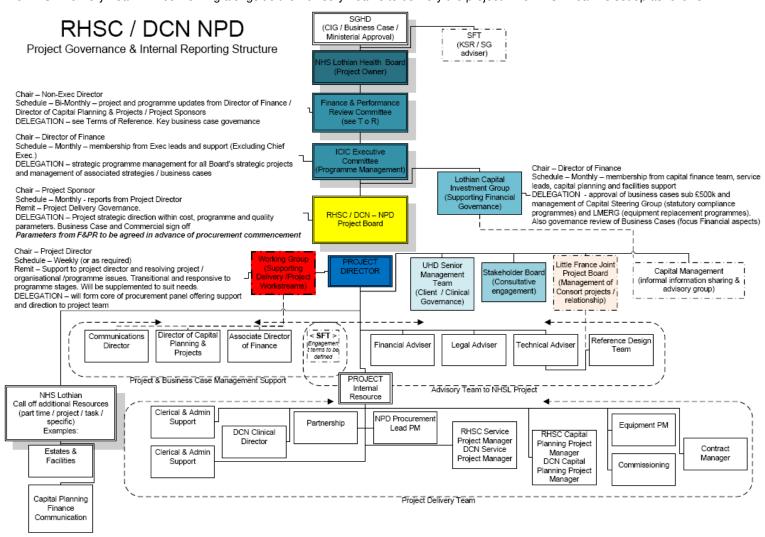


Figure 2: NHSL Delivery Team

#### 2.3.2 Advisory Services Contracted by NHSL

The form of Contract for the Project Management & Technical Advisory Team during the pre-construction delivery phase is the Standard Model Contract on OGC Buying Solutions Framework Agreement RM457/1, signed 20<sup>th</sup> Oct & 2<sup>nd</sup> Nov 2009 (framework agreement).

The Contract is agreed between the following companies:

- Employer NHS Lothian
- Project Management & Technical Advisory Mott MacDonald Limited

Mott MacDonald Limited has engaged the following companies in sub-consultancy agreements to comprise the Project Management & Technical Advisory Team:

- Project Manager / Reference Design / Facilities Management / Procurement Davis Langdon
- CDM Co-ordinator Turner & Townsend
- Cost Adviser Thomson Gray Partnership
- Health Planner Capita

The design team will comprise the following companies, who will be entering into a sub-consultancy agreement with Davis Langdon:

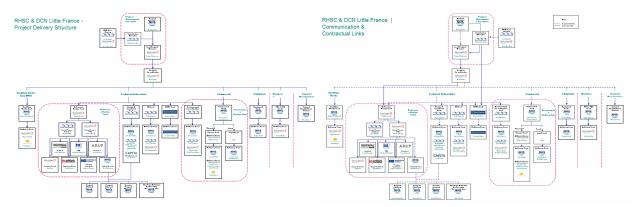
- Boswell Mitchell Johnson -Architectural Services
- Nightingale Associates Architectural Services
- Hulley & Kirkwood Building Services Engineering
- Arup Civil & Structural Engineering

#### 2.4 Project Organisation Structure

The organisational structures will develop and alter as the project progresses. Stage One of the project will include, but is not limited to, the following deliverables: preparation of the reference design, production of NPD procurement document, completion of the Outline Business Case and compilation of the Board's Construction, Facilities Management Specifications, OBC drafting support, contract development and Planning in Principle. The Second stage is competitive procurement of an NPD provider and the third stage is construction delivery. The Organisation Structure is included in Appendix F and Communication and Contractual Links are included in Appendix G

Below two diagrams are given:

- 1) The Project Delivery Organisational Structure diagram sets out the structure of the project, identifying the key roles, work-stream leads and organisations involved in the delivery and management of the project in the two separate stages.
- 2) Communication and Contractual Links portray the primary lines of communication as well as contractual links, and the formal communication is expanded upon in section 4.1:



Figures 3: Organisation Structure

Figure 4: Communication and Contractual Links Structure

### 2.5 The Project Team

The Leads for the Project and work-streams are identified as follows:

Company	Title	Forename	Surname	Notes
NHSL	Project Director and Commercial Lead	Brian	Currie	
NHSL	Business Case Lead	Sorrel	Cosens	
NHSL	Equipment Lead	Graham	Gillies	
NHSL	Clinical Lead – Paediatric	Janice	MacKenzie	
NHSL	Clinical Lead – Neuro- sciences	James	Steers	
Mott MacDonald Limited	Commission Director	Richard	Cantlay	
Mott MacDonald Limited	Peer Review	lain	Courtney	
Mott MacDonald Limited	Procurement and Facilities Management Leads	Paul	Hampson	
Mott MacDonald Limited	Commission Manager and Design & Construct Lead	Andrew	Scott	
Davis Langdon	Peer Review	Kevin	Bradley	
Davis Langdon	Reference Design Lead and Design Manager – M&E Lead (Reference Design)	Tom	Brady	
Davis Langdon	Peer Review	Ken	Fraser	
Davis Langdon	Design Manager – Architect Lead (Reference Design)	Allan	Martin	
Davis Langdon	Lead Project Manager	Fraser	McQuarrie	
Thomson Gray	Cost Consultancy Lead	lain	McLean	
Turner & Townsend	CDM Co-ordinator Lead	Graeme	Walker	
Ernst & Young	Commercial – Financial Lead	Michael	Pryor	
TBC	Commercial – Legal Lead	TBC	TBC	Insert when confirmed

The Delivery Team members are as follows:

Company	Title	Forename	Surname	Notes
NHSL	Reference Design	Neil	McLennan	
NHSL	Cost Management	Kenneth	Ngai	
NHSL	Cost Management	Carol	Potter	
Mott MacDonald Limited	Design & Construct	Andy	Duncan	
Mott MacDonald Limited	Design & Construct	Paul	Kelly	
Mott MacDonald Limited	Design & Construct	Andrew	Kelly	
Mott MacDonald Limited	Design & Construct	Willie	Stevenson	

Mott MacDonald Limited	Design & Construct	David	Stillie	
Mott MacDonald Limited	FM	Carol	Thorburn	
Davis Langdon	Document Control	Helen	Caress	
Davis Langdon	Procurement	David	Cunningham	
Davis Langdon	Procurement	Denise	Kelly	
Davis Langdon	Project Co-ordinator	Naomi	Lillie	
Davis Langdon	FM	Simon	McLaughlin	
Davis Langdon	Senior Project	Richard	Park	
Thomson Gray	Manager Cost Management	James	Gibson	
Thomson Gray	Cost Management	Ron	Thomson	
Arup	Reference Design - Structural	Jeremy	Grant	
Arup	Reference Design - Structural	Bethan	McEwan	
Boswell Mitchell Johnson	Reference Design - Support Architects	Bob	Hedivan	
Boswell Mitchell Johnson	Reference Design - Support Architects	Sonia	Scott	
Hulley & Kirkwood	M&E	Michael	O'Donnell	
Nightingale Associates	Reference Design - Architect	Jamie	Brewster	
TBC	Health Planners	Jason	Spec	
Ernst & Young	Commercial	David	Fraser	
Ernst & Young	Commercial	Lindsay	Crawford	

### 2.5.1 Roles & Responsibilities

Detailed Roles and responsibilities for each individual within the core project team are detailed in Appendix A. Noted below is an overview of each organisation's main functions:

### 2.5.1.1 Employer – NHS Lothian Health Board

NHSL is responsible for providing health and treatment services for the population of the Edinburgh and the Lothian's. NHSL is the Employer for the Project.

NHSL will be responsible for the preparation of the Reference Design, compilation of their briefing requirements (including design, construction and facilities management), interface management with the existing site operator (Consort) and confirmation of all policy related issues.

Refer to 'Figure 2: NHSL Organogram' at 2.3.1 for details.

The Clinical Management Teams (CMT) have operational management responsibility for Children's Services and DCN and as part of this are key players in relation to the RHSC & DCN Little France Project. The CMTs require to have sign off of the Reference Design at all stages prior to final approval by NHS Lothian.

### [NB Role of Partnership to be recorded]

### 2.5.1.2 Technical Advisory team comprises of the following companies:

Mott MacDonald Limited has been appointed as the lead consultant and will deliver the following services:

- Lead Strategic advice
- NPD Procurement advice

- Facilities Management advice
- Design and Construction advice

#### 2.5.1.3 Davis Langdon

Davis Langdon has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Project Management services
- Reference Design Management and coordination
- NPD Procurement support
- Facilities Management advice

#### 2.5.1.4 Thomson Gray Partnership

Thomson Gray Partnership has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Cost Advisory services (excluding Facilities Management)
- Whole Life Costing

#### 2.5.1.5 Turner & Townsend

Turner and Townsend has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Construction Design Management and Health and Safety advice

The role of CDM Co-ordinator is to provide the client with a key project adviser in respect of construction health and safety risk management matters. The CDMC should assist and advise the client on appointment of the NPD contractor and the adequacy of management arrangements; ensure proper co-ordination of the health and safety aspects of the design process; facilitate good communication and co-operation between project team members and co-ordinate health and safety information for issue to the NPD contractor.

### Financial Advisers - Ernst & Young

The Financial Advisor is engaged to provide financial advice to NHSL in preparing the OBC, including affordability and VFM analysis, and throughout the NPD procurement process, preparing financial elements of bid documentation and financial appraisal of bids.

### 2.5.1.7 Legal Advisors - To be appointed

#### [NB Expand services to reflect scope on appointments]

Legal advisers for the project are still to be appointed. Interim legal advisory services are being provided by [insert name] through existing arrangements with a full appointment to be sought through completion.

#### 2.5.2 Project Stakeholders

The project is influenced by two branches of stakeholder groups:

Internal - Clinical and management groups

- Estates & Facilities Management
- Clinical Task Group. Refer to the table below outlining these groups
- Partnership
- SEAT Boards

External - parties with specific project interest

- Scottish Futures Trust
- Scottish Government
- City of Edinburgh Council
- Architecture &Design Scotland

Task Sub	Group
Co-joined Theatres	RHSC - Medical Inpatients + MDCU
Co-joined Radiology	RHSC - Inpatients - Medical & Surgical Shared
Shared Health Records	RHSC - Neuroscience Inpatients
Joined Neuropysiology	RHSC - Haem/Onc
Clinical Management Suite	RHSC - Classrooms
Main Entrance	RHSC - Critical Care
On - Call	CAMHS
Basement people - Domestic/ Staff changing, Materials Management, Bed Store, Estates	RHSC - Clinical Education & Child, Life & Health
Kitchen	RHSC - Clinical Research Facility
RHSC - A&E/Radiology/PARU Shared	RHSC - Family Support
RHSC - Emergency Care + Adult Link	Spiritual Care & Beravement
RHSC - PARU	DCN - Acute Care
RHSC - ASAA + Surgical Inpatients	DCN - OPD
RHSC - Therapies + Special Feeds Unit	DCN - PIU & Inpatients
RHSC - OPD - Group 1	DCN - Therapies
RHSC - OPD - Group 2	

### 2.6 Work-streams

To assist with management of the different elements of the project, the project has been split up into the following work-streams:

- Project Management Executive
- Reference Design Team
- Procurement
- Design & Construct
- Facilities Management
- Construct Design Management Co-ordination
- Commercial
- Equipment
- Clinical
- Business Case (both Outline and Full)
- Enabling Works

The objective of work-streams is to empower individual work-stream leads and their delivery teams to manage themselves in the most appropriate way rather than taking a 'one size fits all' approach to these very different project disciplines.

Work-stream over-views and functions are summarised as follows:

### 2.6.1 Project Management Executive (PME)

The PME comprises the Project Director, the Commission Director and Lead Project Manager. This group will meet fortnightly to manage the overall project. Although not a work-stream in itself, the PME will liaise with all the work-streams at a monthly meeting to monitor progress and ensure the project is proceeding accordingly. The PME meeting invitations extend to Michael Pryor as Finance Lead and will include the Legal Lead [NB update when confirmed.]

### 2.6.2 Reference Design

The purpose of the reference design work-stream relates to the production and management of the Board's "Reference Design" solution for the RHSC & DCN combined build, which will be released to the market during the competitive dialogue period to demonstrate the Board's anticipated design requirements, used to guide bidding parties. These parties are not party to or involved any commercial project activities or discussions their activities are managed to ensure their service delivery is "ring-fenced" aware that during procurement they may join bidding consortia.

Key responsibilities & duties include:

- Preparation of reference design
- Production of Room Data Sheets
- Input of technical data and information for the Equipment Responsibility Matrix
- Developed Engineering solutions
- Robust site development solutions
- Responsibility for Nightingale associates and BMJ architectural reference design
- Responsibility for Arup structural design
- Responsibility for Hulley & Kirkwood M&E design

Co-ordination/ liaison issues may include:

- Liaison and coordination of design team members
- Liaison with NHSL teams in respect of clinical design requirements
- Liaison with NHSL teams in respect of facilities management requirements
- Liaison with third party stakeholders including CEC and A&DS
- Interface with Design and Construction work-stream to ensure aligned requirements and outputs

#### 2.6.3 Procurement

The purpose of the procurement work-stream is to develop and agree the procurement elements of the projects - this includes the procurement strategy and the associated procurement documentation. In addition to guide the other technical sub-groups in the development of their deliverables in a manner which is consistent with the procurement process which is agreed.

The key deliverables and tasks for this work-stream are as follows:

- Development of NPD procurement process
- Development of procurement documentation
- Management of procurement process
- Management of the development of technical elements of the Project Agreement
- Development of technical elements of the Payment Mechanism

Co-ordination / liaison issues may include:

- Liaison with the legal and financial sub-groups for their input into the agreed procurement process and specific procurement issues
- Liaison with the Design and Construction, Facilities Management, Cost Consultancy and Reference Design sub-groups to make sure their progress is consistent with the agreed procurement strategy and approach to key procurement issues
- Liaison with the Project Management Executive to agree the process which needs managed

### 2.6.4 Design & Construct

The purpose of the Design and Construction (D&C) work-stream will be to address all technical non-clinical issues in relation to the procurement of the facility. During the NPD process, the work-stream will be responsible for the preparation of the D&C Output Specification or Board's Construction Requirements for inclusion in the ITPD, liaising with other work-streams so that technical requirements are compatible with all other parts of the procurement documentation. The team will assist in the evaluation of the PQQ responses submitted by potential Bidders. Thereafter input will be provided as required during the CD process culminating in evaluation of the technical aspects of the tenders submitted. The team will advice on issues surrounding the appointment of the Preferred Bidder. During the lead up to FC, assistance will be given in the review of the Preferred Bidders proposals. This will include the review of Reviewable Design Data (RDD) which will continue after FC until all RDD has

been issued by Project Co. Subject to subsequent agreement the D&C work-stream may also be involved during the construction period to monitor works on site.

#### Key Responsibilities and Duties include:

- Technical advice on all D&C aspects of the project.
- Technical input to the Bidder selection process.
- Development of the Non-Clinical Brief for the Reference Design
- Validation of the technical feasibility of the Reference Design
- Development of the D&C Output Specification
- Technical input to the CD process
- Evaluation of Bidders D&C proposals
- Review of the Preferred Bidder / Project Co proposals
- Review of all RDD
- Preparation of ICT briefing requirements
- Assistance on site (if required)

#### Co-ordination/ liaison issues may include:

- Liaise with other work-streams to achieve a consistency of approach particularly in regard to FM
- Liaise with NHSL Estates so that technical proposals / information for Bidders is consistent with NHSL policies
- Liaise with Reference Design Team regarding the Brief and to review proposals
- Liaise with NHSL so that Output Specification is aligned with the enabling works and other issues out with the site.
- Work in conjunction with NHSL during the evaluation of potential bidders PQQ submissions.
- Work in conjunction with NHSL and the other work-streams during the CD process including responding to clarification required
- Work with the Preferred Bidder / Project Co to review proposals
- The D&C work-stream will communicate with NHSL through NHSL D&C Team Member. The work-stream lead will communicate on a regular basis with the other work-stream leads to co-ordinate and maintain consistency across the project.

#### 2.6.5 Facilities Management

The purpose of the Facilities Management (FM) work stream is to assist and advise the Board in respect of ensuring the reference design takes due cognisance of how facilities management services can be effectively delivered during the operational phase. During the NPD procurement process and until Financial close the FM work stream shall work with the design team and the Board to develop FM Service Level Specifications, Tender Documentations, Payment Mechanism and Interface agreements, which shall ensure the new facility is effectively and efficiently maintained.

### Key Responsibilities and Duties include:

- FM advice on design/ material selection for Reference Design
- Development of FM Service Level Specifications (SLS)
- FM Input into PQQ documentation/ evaluation of responses.
- FM Input into tender documentation
- FM Input into competitive dialogue process
- Evaluation of FM tender technical and commercial responses
- Advising on FM costs and benchmarking

#### Co-ordination/ liaison issues may include:

- Liaison with design team members
- Attendance at design team meetings
- Liaison with NSHL teams in respect of developing FM SLS and Interface schedules
- Liaison with NSHL teams in respect of developing payment mechanisms
- Management of FM dialogue meetings with bidders during competitive dialogue meetings.
- Issuing and responding to FM clarifications during the tender period

- Issuing FM Clarifications during the evaluation process.

#### 2.6.6 Cost Consultancy

The purpose of the Cost Consultancy work-stream is to assist and advise the Board in respect of RHSC/DCN capital value, life cycle costing and Change Control Processes during the development of the reference design and during the NPD procurement process up until Financial Close.

### Key responsibilities & duties include:

- Advising in respect of FM costs
- Cost Consultancy advice in respect of overall 'site wide' affordability issues e.g. clinical and external enabling works, etc
- Input into business case preparation
- Input into pre-qualification issues and selection
- Participation in Competitive Dialogue as appropriate
- Input into project Financial Closure
- Advising NHSL Finance on project cash-flow forecasts

#### Co-ordination/ liaison issues may include:

- Continual liaison with design team members
- Attendance at design development meetings
- Liaison with NHSL teams in respect of clinical enabling works and procurement of same (also potential liaison with PFI provider)
- Liaison with NHSL teams in respect of external enabling works and procurement of same (also potential liaison with PFI provider)
- Liaison with NHSL Finance regarding cash-flow forecast requirements and reporting

### 2.6.7 Construct Design Management Co-ordination

The purpose of the CDMC work-stream is to undertake the role of CDM Co-ordinator under the Construction (Design and Management) Regulations during the development of the reference design and during the NPD procurement process up until the Preferred Bidder is appointed.

### Key responsibilities & duties include:

- Notification of the project to the HSE;
- Development of pre-construction information during the reference design;
- Review of strategies and residual risk information produced during the reference design;
- Reviewing health & safety requirements of any construction contracts e.g. additional GI;
- Development of requirements within the ITPD documentation to address the Construction (Design and Management) Regulations:
- Evaluation of the NPD organisations responses during the ITPD and tender e.g. competence requirements and approach to design hazard removal / mitigation;
- Review of strategies and residual risk information produced during the period up to Financial Close.

### Co-ordination/ liaison issues may include:

- Liaison and interface with design team members;
- Attendance at design development meetings;
- Liaison with NHSL teams in respect of Employer duties, obligations and responsibilities in relation to health and safety and statutory obligations.

### 2.6.8 Commercial Services

The following specialist services and work-streams will be required to support the project under the banner 'Commercial'.

#### 2.6.8.1 Financial

The Board will be supported by externally appointed Ernst & Young to provide financial advisory services for the preconstruction and procurement phases of the project. The purpose of the financial advisor function is to provide financial advice to NHSL with regards to the pre-procurement and procurement stages of the RHSC/DCN project.

Key responsibilities & duties include:

- Assistance in OBC preparation;
- Focussing on VFM and affordability;
- Pre-qualification;
- Preparation of financial elements of procurement documentation;
- Financial evaluation strategy;
- Evaluation of financial elements of submissions;
- Risk approach /strategy;
- Dialogue and negotiation support
- Financial elements of approval processes;
- Financial close;
- Post-contract support and support in relation to negotiations with Consort.

#### Co-ordination/ liaison issues may include:

- Working with other disciplines to agree overall procurement strategy and evaluation strategy;
- Working within agreed formats and structures for deliverables so they fit within overall project process;
- Agreement of roles in relation to payment mechanism drafting and calibration (which will involve liaison with technical team preparing the performance framework, legal team preparing PA);
- Liaison with legal team on areas of PA requiring financial input;
- Liaison with NHSL finance team on issues of affordability and approval process requirements;
- The procurement project team will need to include the commercial and technical elements of the overall organogram, with NHSL and advisory staff forming the team. Team meetings would be geared to ensure good communication and understanding of respective roles.

#### 2.6.8.2 Legal

The Board will be supported by **[insert name]** who have been appointed externally to provide legal advisory services for the pre-construction and procurement phases of the project. The purpose of the legal advisor function is to assist and advise the Board in respect of their legal obligations and entitlements, procurement advisory services and commercial deal structuring.

Further information to be provided: Key Responsibilities & Duties Lines of Communication

### 2.6.9 Equipment

A dedicated equipment work-stream has been identified who will be responsible for determining the facility wide equipment requirements. This function will be tasked with confirming the users' ultimate equipment requirements for inclusion within the procurement model. This role will also consider the replacement and transfer strategies in place within the RHSC and DCN facilities in the term leading up to facility handover.

The equipment work-stream is formed from NHSL staff with varying duties through the work-stream process.

The main team consists of Graham Gillies, work-stream lead & team members Neil McLennan, Douglas Coull & Mike Conroy providing the support for the process. Neil is providing constant daily support and Douglas & Mike when and as required.

Other NHSL contacts who are providing professional support and updated costs as follows: Stewart Leitch – Anaesthetic Technical Services Manager Steve Kesterton – General Medical Physics Equipment Manager, RIE

Dave Dewar - General Medical Physics Equipment Manager, WGH Caoimhe McIntyre – X-Ray

Nick Weir – MRI & CT Steve Pye – Ultrasound

### Key responsibilities & duties include:

- Preparation of Equipment Birefing Requirements
- Development of a detailed Equipment Responsibility Matrix;
- Procurement management of Board specified equipment.

### Co-ordination/ liaison issues may include:

- Liaison and coordination of design team members
- Liaison with NHSL teams in respect of briefing requirements
- Coordination with procurement work-stream in relation to procurement compliance
- Interface with Design and Construction work-stream to ensure aligned requirements and outputs

A draft Equipment Schedule Process is given below for reference:

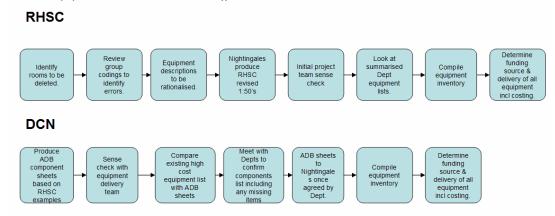


Figure 3: Draft Equipment Schedule Process

#### 2.6.10 Clinical

The purpose of this work-stream is to ensure the clinical needs and interests of the project are fully incorporated, encompassing all elements of design, health planning and operation. Its function is to ensure that the key requirement of an efficient, practical, functional facility is achieved throughout both the reference and bidding design phases. The clinical work-stream also represents the interests of the clinical user-groups in the D&C, FM and Equipment work-streams and provides an advisory service to the other elements of the project as necessary.

Key responsibilities & duties include:

- Reference Design: review and analyse design drawings, providing feedback to the Design Team. Action NHSL Issues.
- Clinical Operational Briefs: lead on the development/production/review of the clinical operational briefs
- Clinical Out-Put Specifications: lead on the development/production/review of the clinical out put specifications
- Clinical Pathways and Flows: Review clinical pathways and flows to ensure SMART working is incorporated
- Workforce Planning: provide support to the RHSC/DCN CMT on the clinical workforce planning
- Bed Modelling/Radiology/Theatres (RHSC and DCN): provide support to the RHSC/DCN/Radiology/Theatres CMT on all types of clinical modelling
- Clinical Enabling Work RIE: provide support in associated clinical enabling work in the RIE A & E/Critical Care/ etc

#### Co-ordination/ liaison issues may include:

- Key interface with the following work-streams: FM, Equipment, Design and Construct and Business Case.
- Key Interface with:

CMT's (RHSC & DCN, Radiology, Theatres/Critical Care/Laboratories, CAMHS)

Leads/Deputies of the Clinical Services being re-provided

Health Care Planners - setting specifications and instructing work through DL Project Manager (Lead Bed /Radiology /Theatre Modelling)

Members of the work-stream group

Accessing Design Task Group members as needed

Workforce Planning Task Group

Bed Modelling Task Group

#### 2.6.11 Business Case

The purpose of this work-stream is to deliver both the Outline Business Case and Full Business case in accordance with key mile-stones.

This work-stream comprises the NHSL Finance Project Manager, NHSL Capital Planning Project Manager and E&Y Financial Advisor, with the NHSL Clinical Project Manager or Service Planning Project Manager and Technical Advisor and NHSL work-stream lead from relevant work-streams as required.

Information required is the output from:

- Reference Design Group and Equipment output turned into the financial case by the Commercial Group;
- Other revenue costs from NHSL Finance;
- Commercial Case from the Procurement Lead;
- Management Case.

Work-stream co-ordination is managed through the Project Management Executive team and lines of communication are outlined in the section 2.4 "Project Organisational Structure" and section 4.0 "Project Communications".

The work-stream structure is contained in Appendix D.

# 3. Project Meeting Strategy

### 3.1 Meeting Structure

The meeting structure covers various project work-streams and functions. These are summarised by the structure below, covering governance and project function:

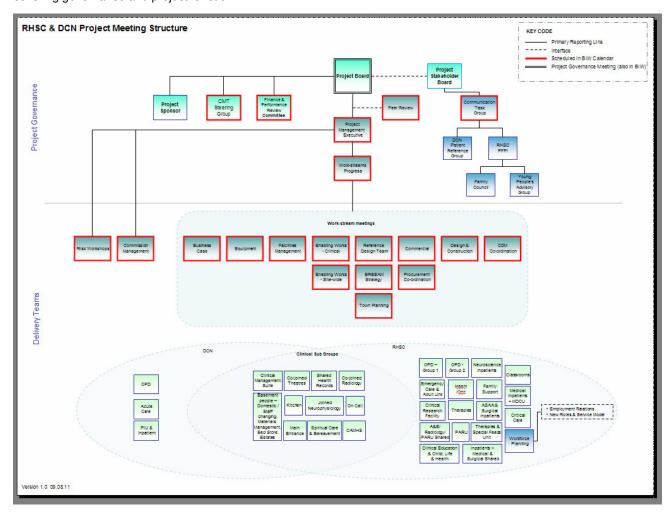


Figure 6: RHSC & DCN Project Meeting Structure

### 3.2 Meeting Terms of Reference

The meeting terms of reference and abbreviations and meeting frequency are illustrated below:



Figure 7: Meeting Terms of Reference

### 3.3 Meeting Matrix

A Meeting Matrix is being compiled for the project and will be made available on BIW once the first draft is complete.

The purpose of the matrix is to identify and communicate the roles undertaken at each meeting and the distribution of information associated with the meeting. The matrix records the following by way of a letter coding system:

- The Meeting Chair (C)
- The Meeting Organiser (O)
- The Attendees (A)
- Distribution Group (all information associated with each meeting) (D)

The detailed Meeting Matrix is contained in Appendix E

#### 3.4 The Meeting Schedule

The meeting schedule for the project is stored within the BIW Project Calendar.

Why use BIW Project Calendar?

- BIW provides useful functionality that can store a high number of meetings in one shared calendar view. It can therefore provide visibility of all project meetings to its users this ensures that everyone receives the same/consistent information;
- It is a "live" system thereby providing 'real time' information directly to each user;
- It is a live electronic meeting schedule avoiding continual distribution of document revisions.



Figure 8: Example BIW Calendar

How does it work?

- It is similar to Outlook; it involves 'adding a meeting' and completing the basic fields with information;
- Any user can input their team meetings or other ad hoc meetings;
- Meetings that individuals are required to attend are highlighted by a colour key.

### What about Outlook?

- BIW Project Calendar will be used in parallel with Outlook. One does not replace the other for various reasons, but primarily because not everyone involved in the project is a BIW user;
- Outlook will continue to be the primary management tool for scheduling meetings in diaries. BIW Project Calendar is being used as a meeting communication tool for everyone involved in the Project;
- Note: Each meeting organiser will have their own approach to managing the entry of meetings into the attendee's diaries in Outlook or other (e.g. email with information, a meeting invite, verbal etc).

What meetings are included within the Project Calendar?

- The core, regular meetings are to be scheduled in the BIW Project Calendar;
- Any other ad hoc meetings should also be noted within the Project Calendar by the meeting organiser.

Who are responsible for the Project Calendar?

- The Project Co-Ordinator (Naomi Lillie, DL) will take responsibility for maintaining the information within the BIW Project Calendar for regular project meetings and *ad hoc* meetings identified as relevant project-wide;
- All organisers of meetings are to add the Project Co-ordinator as an 'optional' attendee to ensure up-to-date information is communicated through Outlook Invitations, and CC'd where updates are distributed by e-mail (NB the Project Co-ordinator will not attend these meetings, this is just for information purposes);
- Clinical Design Sub-Group Meetings are to be updated by Zuzana Stofankova, of the NHSL Project Team, who is responsible for all scheduling of the Clinical Design Sub Group level meetings;
- Each of the work-stream leads are responsible any inputting any ad hoc meetings specific to his/her own work-stream;
- Individuals are responsible for inputting and maintaining meeting information they choose to upload to the calendar.

### 3.5 Meeting Protocols

All meeting invites should be formally issued via Outlook (or other diary system) where possible. This ensures that all attendees are updated with diary information simultaneously and avoids unnecessary duplication of effort.

Work-stream leads are responsible for chairing, recording and general coordination of work-stream meetings.

The Agenda and Action Notes of the meeting are to be prepared and issued by the party responsible for chairing the meeting or a designated note taker.

Distribution of the meeting outputs for each meeting shall be recorded on the minute or meeting note.

Agendas and Meeting papers should be circulated at least 3 working days prior to the meeting.

The Minute should be issued to the distribution list within 96 hours of the meeting.

All parties attending meetings are responsible for noting their individual actions and progressing actions arising. Teams should not rely upon the issue of minutes for progressing project matters.

All parties attending meetings are responsible for printing their own copy of meeting papers.

Each Consultant will retain responsibility for convening meetings with appropriate third parties to permit design development as the project proceeds and to produce and circulate a formal minute/summary note of this meeting.

Individuals are responsible for sending their formal apologies for non-attendance at a meeting. This should be done as far as possible in advance of the meeting. Notice should be given to the Meeting Chair and/or Meeting Organiser.

## 4. Project Communication

#### 4.1 Lines of Communication

The general lines of communication for the project are illustrated on Figure 1.0 – Project Organisational & Communication Structure in Section 3 of this document.

Formally, the lines of communication for the project shall be as follows:

- Communication lines both formally and informally are to be in accordance with the Project Organogram in Section 2.4 of this PEP. All contractual lines are shown by the solid lines and all communication routes are shown by dashed lines.
- All formal communication between the Board and the technical advisors which constitutes any variation or amendment to the main contract will be formalised between the Board Project Director and the Commission Manager from Mott MacDonald. The Board's representatives within each of the work-streams will be responsible for requesting proposed changes to the Project Director and these will be formalised in accordance with the change control *pro forma* contained in Appendix C. Each of the work-stream leads will be responsible for notifying the Project Management Executive team of the changes requested.
- All work-stream leads will provide regular updates to the Project Manager (Davis Langdon). A formal progress report will be
  prepared by the work-stream leads on a monthly basis and issued one week prior to the monthly meeting.
- The Lead Project Manager will be responsible for the overall co-ordination and management of the work-streams. This will be managed via a monthly work-stream co-ordination meeting which will be chaired by the Lead Project Manager and attended by the work-stream leads, Commission Director and Project Director.
- The Lead Project Manager will be the first point of contact for the Project Director on all day-to-day issues. The lead Project Manager will meet regularly and keep the Commissioning Manager fully briefed to ensure he is fully aware of all project matters.
- In general terms the work-streams will communicate and function internally to their groups. Where cross work-stream communication and interface is necessary this will be facilitated via the leads of the work-streams. If required, co-ordination meetings will be arranged to address matters. Matters arising from the work-streams which need to be addressed by third parties or other NHSL consultees will be co-ordinated by the NHSL representative of that work-stream.
- The Lead Project Manager will be included in circulation lists for all project related correspondence where relevant. In order to ensure effective communication with parties involved, or affected by the Works associated with the project, a joint communications protocol will be developed for engaging and managing stakeholders.
- The Project Director will communicate with the Commission Director on all contractual matters and raise any concerns in relation to project matters.
- The NHSL Project Team will communicate with the design team members via DL for all formal matters in particular when instructing a change in brief.
- DL will require all formal changes to be instructed by the Commission Manager.

All communications are to be as clear and concise as possible and all parties are encouraged to verbally discuss issues. The use of e-mail correspondence / communication is to be encouraged; however, any documents relating to specific contract issues / mechanisms or legal documents, financial certificates, or where signed and witnessed signatories are required, hard-copies must be provided.

### 4.2 Project Contact Directory

A Project Contact Directory will be made available on BIW and is designed to be accessible to all parties to find the relevant persons to contact where necessary. The document is maintained by DL. Any updates required to the directory should be directed to Naomi Lillie.

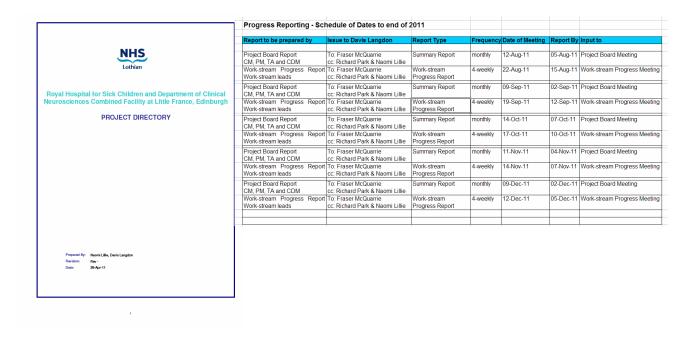


Figure 9: Project Contact Directory Example Pages

### 4.3 BIW Project Collaboration Tool & Document Control

- 4.3.1 The project utilises BIW as a channel for communication and storage of project documents and for all contract administration. BIW is the management tool for the following procedures/protocols:
- Design Management and storage;
- Risk Register;
- Data Room;
- Collation of Board policies and reference documents;
- Procurement and Contract documents.

It is planned that following Stage 1 (reference design and procurement set-up phases) BIW will be used for live data a tendering facility for bidding consortia in the Competitive Dialogue process.

### 4.3.2 BIW Administration Roles & Responsibilities:

Each project has users carrying out the following admin roles:

- Project Information Coordinator (PIC) The PICs are responsible for requesting new companies and adding new users to the project and amending user rights accordingly. Any changes to the configuration of BIW must be authorised by a PIC. On this Project the PICs are Naomi Lillie and Amy Khan of DL;
- Company Administrator (CA) At least one user per company should be nominated to be the CA for that company. This person can create new users for their company and edit existing user details and the rights of their company users. This is normally the user who attends the initial BIW training. This user will also be able to train other users within their own companies in the basic areas of the system. Company Administrators are as per the table below:

COMPANY	ADMINISTRATORS
NHS Lothian	Zuzana Stofankova (Christine McGeechan TBC)
Davis Langdon	Amy Khan
Mott MacDonald	David Stillie
Nightingale Associates	Sarah Menzies
BMJ	Cameron Smith
Arup	Jessica Lyall (Arup)
Hulley & Kirkwood	Brain Feeley

#### 4.3.3 BIW Technical Assistance

System Administration & Helpdesk can provide information and assistance in regards to queries about the channel. Email: <a href="mailto:helpline@biwtech.com">helpline@biwtech.com</a> or Tel: +44 (0) 845 1300 999.

The Project BIW Consultant is Richard Moyle (Email) -

System Help Guides – Help guides are available throughout the various screens in the channel. Clicking on screen will take you to the relevant help guides for that particular section.

#### 4.3.4 Use of BIW

The use of BIW is considered imperative for such means and all required parties are to obtain log-in details and publish documentation / drawings under the appropriate folders and as per the guidance outlined in the BIW Project Collaboration Tool Protocols Document available within BIW. It is expected that BIW should be utilised on a daily basic by the key members of the project team.

### 4.4 Change Control Procedure

NHSL, Mott MacDonald Limited and their sub-consultants will follow the change control procedures in accordance with the Head Contract Agreement. In addition all parties will adopt the following protocols:

Each sub-consultant will submit change requests to Mott MacDonald Limited if additional services or variations to their agreed scope of service are introduced. The following process should be followed dependent on the nature of the change:

#### Variation instructions notified by the sub-consultant to Mott MacDonald Limited:

- Step 1 The sub-consultant will raise a Change Control Form, outlining anticipated financial change, programme implications and consequences of the change
- Step 2 Mott MacDonald Limited will consider the implications of this change and submit a Change Control Order to NHSL for approval using the Change Control document contained in appendix C
- Step 3 Mott MacDonald Limited will return to the sub-consultant a signed off copy of their Change Control Form.

### Variation instructions notified by Mott MacDonald Limited to the sub-consultant:

- Step 1 Mott MacDonald Limited will notify each sub-consultant when they require a change to the agreed scope of service and will instruct the sub-consultant to complete a Change Control Form. Mott MacDonald will provide sufficient briefing information within their request in order that the sub-consultant can confirm anticipated financial change, programme implications and record any associated consequences.
- Step 2 Mott MacDonald Limited will consider the implications of this change and submit a Change Control Order to NHSL for approval using the Change Control document contained in appendix C
- Step 3 Mott MacDonald Limited will return to the sub-consultant a signed off copy of their Change Control Request.

Mott MacDonald Limited will return comments on the proposed change order within five working days. Mott MacDonald will notify the sub-consultant to proceed and implement the change or reject the change within ten working days of transmittal. If no response is given within the ten working day period then the request for change will be deemed as approved. Change control requests will be submitted to Mott MacDonald from each sub-consultant via email. Each sub-consultant will retain a schedule of approved change orders.

All variation orders submitted by sub-consultants will be accompanied by a resource schedule. In the event that Mott MacDonald Limited instruct works to commence without cost and programme effects being agreed all costs reasonably incurred in relation to the variation will be recovered.

The Board's representatives within each of the work-streams will be responsible for notifying the Project Director of proposed changes. Each of the work-stream leads will be responsible for notifying the Executive Project Management team of the changes requested.

#### 4.5 Stakeholders

There are many stakeholders involved in a project of this nature and these are to be identified under four main headings for ease of reference, as follows:

- NHS Lothian, comprising Lothian Partnership Forum, Executive Management Team, RHSC Re-Provision Clinical design Groups, Facilities Management:
- Statutory Authorities and Public Utilities including the Health & Safety Executive. This also includes government agencies such as Scottish Futures Trust (SFT) and other bodies such a Architecture and Design Scotland (A&DS) who are a statutory consultee through the planning process;
- Funding comprising Lothian NHS Board and the Scottish Government, PFPI (Child 7 family Advisory Board), patients, service users and charities;
- Other Stakeholders comprising National Education Services Scotland (NES), other Heath Boards, core NHS Lothian sections & others.

It is important to establish for each stakeholder, the role they have, their influencing factor, the impact they will have and how each communicates and engages with the project as a whole. This information is currently under development.

The Stakeholder Map will be stored within BIW.

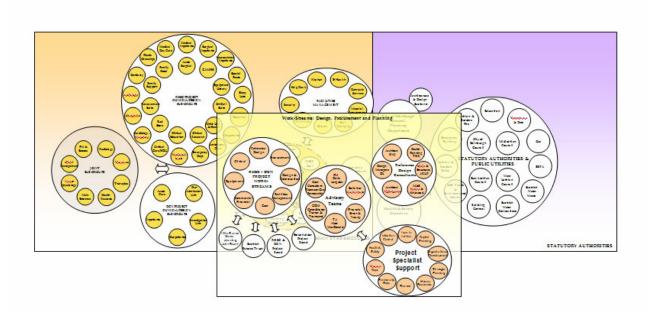


Figure 10: Example Stakeholder Map Diagrams

# 5. Programme, Progress & Reporting

### 5.1 Key Mile-stones

The key milestones of the project are detailed as follows:

Milestone:	Date:				
Reference Design Brief	17/06/2011				
Concept Design 1:500 & Approvals	09/09/2011				
Scheme Design 1:200 & Approvals	03/02/2012				
SGHD Approval of OBC	15/11/2011				
SGHD Approval of FBC	10/07/2013				
Planning in Principle Granted	09/11/2011				
Detailed Planning Granted	19/08/2013				
Car Park B Transfer Deadline	14/09/2011				
Project Information Notice	18/10/2011				
Bidders' Day	02/12/2011				
Release OJEU Notice	15/11/2011				
PQQ Period	31/01/2012				
Select Short-list Bidders	27/03/2012				
CD – Open Dialogue	06/04/2012				
CD – Interim Process	27/11/2012				
CD – Final Tenders	21/01/2013				
CD – Evaluation	22/04/2013				
Appoint Preferred Bidder	22/04/2013				
Commercial Close	22/07/2013				
Financial Close	23/07/2013				
Construction Start	18/11/2013				
Construction Work Complete	22/07/2016				
Hospital Going Live	05/09/2016				
	·				

DL will provide and update the programme for all Progress meetings tracking project development and identifying potential matters arising which may affect the identified milestones recorded above. In the event that changes to the programme are necessary these will be considered as part of the work-stream Progress Meeting and approved for implementation by the NHSL Board.

#### 5.2 Progress Monitoring and Reporting

The diagram below illustrates the Progress Reporting Structure for the project. A work-stream lead has been identified within each of the service lines and will provide a summary of progress made for inclusion in the monthly Progress Report. This should to be provided to the Project Manager 5 working days in advance of the meeting.

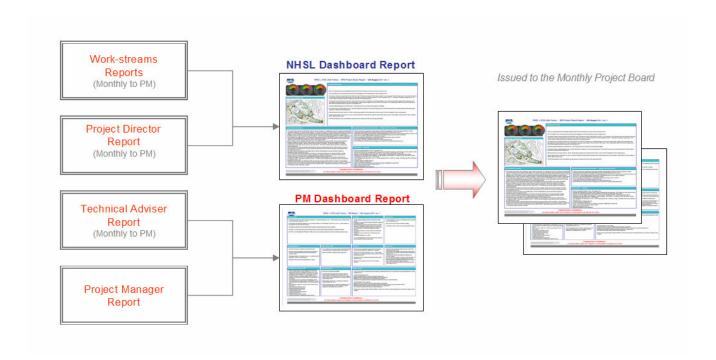


Figure 11: Project Reporting Structure

- 5.2.1 CDM Co-ordinator Report | Turner & Townsend
- 5.2.2 Cost/Financial Report | Thomson Gray Partnership
- 5.2.3 Project Management & Technical Advisory | Mott MacDonald
- 5.2.4 Design Team | Lead Nightingale Associates with support from BMJ / ARUP / Hulley & Kirkwood
- 5.2.5 Project Management & Technical Advisory Report | Davis Langdon

DL will provide a monthly Project Manager's Report for issue to the Project Commissioner. The purpose of the Project Manager's Report is to fully inform the Project Director on the progress of the project, in relation to programme, design, cost, procurement and construction; in particular to highlight any areas of concern and critical activities to be undertaken by the Client Team, Project Board or other members of the project team. The Project Managers Report is a dashboard style report which forms part of the Monthly Steering Group Dashboard Report.

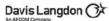
An example of the full NHSL Steering Group Dashboard Report is shown at Appendix B.

The progress report will contain:

- Summary of the overall progress made within the reporting period;
- Updated on the progress made by each work stream;
- Programme Summary and update;
- Identification of key issues;
- Summary of key risks and any changes in the risk profile.

#### 5.2.6 Progress Reporting Schedule

An example progress reporting schedule, from the RHSC & DCN Little France Project for 2011, is shown below:





#### Progress Reporting - schedule of dates to end of 2011

Report to be prepared by	Issue to Davis Langdon	Report type	Frequency	Date of meeting	Report by	Input to
		Work-stream Progress Report	monthly	03-Oct-11	26-Sep-11	Work-stream Progress Meeting
Project Board Report CM, PM, TA and CDM	To: Fraser McQuarrie cc: Richard Park & Naomi Lillie	Summary Report	monthly	14-Oct-11	07-Oct-11	Project Board Meeting
		Work-stream Progress Report	monthly	31-Oct-11	24-Oct-11	Work-stream Progress Meeting
Project Board Report CM, PM, TA and CDM	To: Fraser McQuarrie cc: Richard Park & Naomi Lillie	Summary Report	monthly	11-Nov-11	04-Nov-11	Project Board Meeting
		Work-stream Progress Report	monthly	28-Nov-11	21-Nov-11	Work-stream Progress Meeting
Project Board Report CM, PM, TA and CDM	To: Fraser McQuarrie cc: Richard Park & Naomi Lillie	Summary Report	monthly	09-Dec-11	02-Dec-11	Project Board Meeting

#### Figure 12: Example Progress Reporting Schedule

### 5.2.7 Reports & Documents

All documents prepared by the Project Management & Technical Advisory team will be released containing the Mott MacDonald Limited and Davis Langdon logos. The document originator will use the agreed templates for all minutes, reports and letters. Changes to documents will be covered on the "Document Issue".

All documents should contain the following disclaimer statement:

"Commercial In Confidence - not disclosable under the Freedom of Information (Scotland) Act 2002"

#### 5.3 Action Tracking

DL has introduced a centralised Action Log for the project. The purpose of the Action Log is to ensure that all key actions are managed and tracked through to completion. It adopts a proactive approach to the management of activities, and provides a useful *aide memoir* to the project teams. The Action Log will be updated and circulated 3 days in advance of the Progress workstream meetings. The key elements are as follows:

- Any person can raise an action to be added to the log for tracking purposes;

- DL is responsible for maintaining the information within the log and communicating updates and additions to the log on a regular basis (minimum fortnightly basis);
- DL will report to the client team at weekly team meetings on the progress of actions, ensuring that any overdue actions are highlighted, and escalated if appropriate.

An example of the Project Action Log is shown below at Figure 10.0. Revisions of the Action Log are also available within BIW, filename "Project Action Schedule".

### **RHSC & DCN Little France**

Action	Action required
- 10 A 1004	
	Action required in next 4 days
Date 19 August 2011 Outsta	Outstanding - immediate action required

No	Action Description	Date Matter Raised	Work-Stream	Action Owner	Date By	Status	Actions Taken
14	MP requires costings from IMcL in early August as it takes 2-3 weeks	31-May-11	Commercial	IMcL	05-Jun-11	Open	
15	MP to check how value-for-money will be evaluated	31-May-11	Commercial	MP	20-Jun-11	Open	Update 19.07.11 (BC, verbal): Awaiting SFT guidance.
20	BC to arrange NHSL document of roles and responsibilities and forward to NL	31-May-11	Commercial	BC	27-Jun-11	Open	
23	Briefs and Operational Policies are to be delivered on the 6th June	31-May-11	Reference Design	NMcL	06-Jun-11	Open	
24	Helipad and Kitchen specialist consultants may be required, AS to discuss with JB and TB and consider appointing through Nightingale Associates	31-May-11	Reference Design	AS	02-Jun-11	Open	Update 22.07.1 (NL): Helipad appointment covered by actions 210 & 245, kitchen appointment ongoing.
25	JB requested legal boundary clarification – BC to provide AS with information / instruction for an engineer.	31-May-11	Reference Design	DSti	03-Jun-11	Open	Update 15.07.11 (NL): Amended from BC action to DS to liaise with AS.
26	BC to update TB and JB with Reference Design requirements and Consort negotiations at Thursday's meeting	31-May-11	Reference Design	TB	02-Jun-11	Open	Update 15.07.11 (NL): Amended from BC action to TB.
27	BC to send Transport information to FMcQ to pass on to TB	31-May-11	Reference Design	FMcQ	02-Jun-11	Open	Update 15.07.11 (NL): Amended from BC action to FMcQ.
29	RC to request detailed methodology from lain McLean to clarify cost workings – some detail has already been provided, but more explanation is required.		N/A	RC	10-Jun-11	Open	Update 08.08.11 (RC): This is to be reviewed with TC2. Action ongoing.
30	BC requested guidance of funding options from Mott MacDonald. AS to liaise with Graham Gillies.	06-Jun-11	N/A	AS	20-Jun-11	Open	
31	BC and Carol Potter to meet with the finance team at the Health Board, where the scope will be established. BC to issue scope when confirmed.	06-Jun-11	Commercial	BC	20-Jun-11	Open	

Figure 13: Example Project Action Log

# 6. Risk Management

### 6.1 Risk Management Approach

Risks will be identified through a combination of risk workshops, work-stream development activities, design and scoping production, policy requirements and through management activities. The risks identified are to be managed in pro-active manner in accordance with the mitigation strategy agreed for each risk identified. The risk register remains a live document which must be regularly reviewed and updated by all parties. Risk will be categorised and quantitively scored in accordance with the probability and impact scoring matrix. Following identification and risk assessment each risk will be ranked to understand the key risks within the project, in order that these can be priority managed. Mitigation strategies will be developed for each of the key risks and will be assigned to individual work-stream leads for action. Risks will be reviewed and reported to DL on a monthly basis for inclusion within the updated register.

The outputs of the risk management process will also be considered by the commercial work-stream. Ernst & Young will be responsible for monitoring financial risk, and DL will be monitoring project risks and facilitate monthly risk management workshops.

Any new risk to the project should be raised via the appropriate notification system and assessed during future workshops..

#### 6.2 Risk Register

The Risk Register will be stored within BIW for reference by all parties.

	Risk Identification Pre Mitigation Assessment								ent				Categories						Risk Management					
															Luantifial	1.		Un-Quantifiable						
100													Han HI	Hum HPD Rirks HPD Rirks Retained SFT SPV										
				_											Retains	4 SFT	SP#				8	_		
	Risk Description	Risk Types (refer to SCIM guidance)	Probabil ity (1-5)	Impact Cost (1-5)	Impact Program me (1-5)	Risk Score Cost	Impact Cost £	Risk Score Programm	Impact Programm ¢ £	Total Risk Value (Program me + Cost)	Average Risk Score (Cost & Programm e)	Risk Index	Clinical, Soft FM &   Isangement	Enabling Vorks	NHS Project	SFT Project	NPD Project Lerel	Management	Management Actions Planned	Risk Owner	Action Owner			
Inadequ zuppart taredez relation Yaung P	ate transport arrangements to patients, staff & visitor access igned services. In particular in tospecific needs of Children & coples services	Derign <i>i</i> Construction types	2	2	1	4	613,687.58	2	62.575.55	622,253.85	3		•						Transportations trategy developed in accordance with site wage and patient switter modelling studies. Strategy developed in conjunction with Estates and OEC	RDT				
	or of the Consultant Team goes	Procurement f Funding types	3	1	5	3		15			,			•	•				Financial text to determine financial stability. Ongoing monitoring and checks.	СР				
Failure t an pragr Statuta	ta abtain planning pormizzian rammo (inability tazatirfy all rry Canzultooz)	Design# Construction types	2	1	5	ž	613,125.00 65,625.00	10		6133,317.31 657,135.33	6	A .		•	•				PiPrubmizrian.rubmitted an pragramme. Engagement uith CEC uill ensure response uithin anticipated timeframe. CEC governed by maximum response period	BC				
Provinu altoratii (Mainto arrango zito).	uly unidentified highway anz are required. nance af all existing access ments taffram Little France	Dorign <i>i</i> Construction types	3	¥	ž	12	£13E,875,88	)		Q14,117.15	V /			9	1				Engagement with Highwayz authority and their advirerz during dezign and planning pracezz haz identified extent af cantifution works to be conditioned.	RDT				
Amemb into Liqu Contrac	or of the Supply Chain quer uidation -NPD Coor Tier One stor andrupply chain	Procurement f Funding typer	3	1	4	,	613,125.88	12	G av,m.n	ar,33.02	7.5			•			•		Financial tart to dotermine financial ztobility. Ongoing munituring and checks.	TA/L				
Ricktha		Procurement <i>f</i> Fundingtyper	3	la .	4	3	613,125.88	12	684 174 E2	697,259.62	7.5			•					Detailed derian, planning and pracurement wark pragnezzing in accordance with ztrategic delivery pragnamme to ensure pragnamme delivery across all project elements	вс				
Difficult	tier in corordinating works with	Derign <i>f</i> Construction types	5	2	4	10	6136,875.88	20		6557,451.32	15			•					Convertuerly order and Contract variations to best rectured to ensure explicit delivery obligations including quality and programme. Budget risk azumed by Convert on variation agreement.	GC				
(DELIVE Risk tha and apor comples unachie	(RT) It Dolivery of Enabling World rational interface will be more It than anticipated and vable against funding.	Dorign <i>i</i> Construction types	d	4	1	16	6424,875.88	4		6434,752.75	10			•					Detailedztakohalder en gagement plan during dezign phare ta capture/ recard briefing requirements. Warks ta ensure clinical functionality of RHSO/DOM and maintain narmal aperation in RIE Campaliance with defined channe.					
REQUIR Change		Clinical Service /Operational	3	3	3	,	638,437.58	9		6134,435.13	•				•				Reference derign recognition of SHFM20 and other coder of practice. Ongoing engagement with infection control rep's during RD process and OD process	RDT				
SPECIFI DELIVER The time eracure lue ta th	Grp 2,3 84)EQUIPMENT ICATION PROCUREMENT AND SY TIME UNDERESTIMATED otable far equipment ment and delivery in nat met he late delivery af equipment	P	ž	2	4	4	613,687.58			655,245.43	6				•				Dedicated and experienced Equipment Graup farmed to deliver function Detailed programme and metrology to be prepared Commissioning Manager to be	вс		İ		
CONSTR Rick of d	dolay an achieving agreement riof andfarzubzeguent	Dorign <i>i</i> Construction types	3	4	1	12		3	,34		7.5	Ì			•				Dataile datakohalder engagoment plan during reference dazign pracezz. Campliance uith defined change cantral pracezz	BC		Ī		

Figure 14: Example Risk Register

# 7. Design Management & Sign-Off Process

### 7.1 Design Sign-Off Protocol

A full Design Sign-off protocol has been developed by DL and agreed with all parties.

The design sign-off milestones are included within the Stage 1 Procurement and Exemplar Design work-stream Programme.

#### 7.2 Design Monitoring / Design Issue Log

A design monitoring system will be implemented through the design development period which ensures all documents, drawings, schedule etc issued by the design team are properly checked and signed off by the NHSL Project Team on behalf of the clinical task groups. This will ensure that changes are tracked and provide a clear audit trail.

DL has introduced a master Design Issue Log to capture all design issues throughout the Exemplar Design process. The log is a live document and will be maintained by the Design Manager throughout the design process and released to the Project Manager on a weekly basis. Information, notes, comments and proposed changes will be recorded by the Design Manager at design team meetings and reported to the Project Management Executive. The PME will be responsible for accepting changes arising from these meetings. Special ad-hoc meetings may also be called to review and instruct proposed changes if required in timescales out with the bi-weekly PME meeting cycle. Revisions of the log will be published in BIW on a regular basis.

#### 7.3 Client Instruction & Decision Log

DL has introduced a Client Instruction & Decision Log to ensure that any instruction or decision received from any member of the client team is verified by the Project Director prior to a formal instruction being raised via the contract. The log is maintained and issued by DL to the Project Director for approval on a regular basis. An example of the Client Instruction Log is to be included when underway. An example of the Client Instruction Log is shown below:

e Issued:	og   Mo	ott MacI	Donald Ir	nstruction	ı Log								
CF Ref ▼	Instructio n Owner	Action / Instructio n Require	Instructio n Raised By	Date of Request	Require d By Dat	CCF Title	Description .	CCF Raised	Date of MML Instructi	Instruction Approved/ Rejected	Financial Change	Programme Change	Comments
001	Davir Langdon	Scope Variant	ARUP	30-Jun-11	14-Jul-11	Bird Survey	Bird Survey in relation to future EIA required as part of the Planning in Principle process (OEO)	Yes	09-Aug-11	Approved	1,095.00	Nil	CCO Reference Matt MacDanald 003
002	Davir Langdon	Scape Variant	BMJ/NA	06-Jul-11	20-Jul-11	Landroape Derign	Landrcape and Virual Impact Arroxement in relation to future EIA required as part of the Planning in Principle process (CEC)	Yes	09-Aug-11	Approved	12,240.00	Nil	CCO Reference Matt MacDanald 005
003	Davir Langdon	Scope Variant	BMJ/NA	06-Jul-11	20-Jul-11	Catoring Consultancy	Provision of specialist catering consultancy services	Yes	10-Aug-11	Approved	TBC		Cartr to be agreed
004	Davir Langdon	Scope Variant	Mantagu Evanz	06-Jul-11	20-Jul-11	PlanningFoo	Ro-imburroztatutary Planning Foo	Yes	09-Aug-11	Approved	8,075.00	Nil	
005	Davir Langdon	Scope Variant	Davir Langdon	06-Jul-11	20-Jul-11	Buriners Care Support	Pravide drafting input for the Outline Buriness Case on the risk, contractual and project management arrangements	Yes					Outstanding, MM taraise
006	Davir Langdon	Scope Variant	Davir Langdon	12-Jul-11	Z6-Jul-11	Reference Dazign	Provide Reference Derign to Stage C. Architecture, C&S and M&E (including derign management function)	Yes	09-Aug-11	Approved	1,404,000.00	Nil	CCO Reference Matt MacDanald 003 Approved instruction excludes Design
007	Davir Langdon	Scope Variant	Davir Langdon	28-Jul-11	11-Aug-11	Reference Dazign	1:500 derign changer to reflect revised client brief in accordance with updated Schedule of Accommodation reference: Jaint Build Accommodation Summery 27 July Version 2	Yes	09-Aug-11	Approved		Nil	CCO Reference Matt MacDanald 006
008	Matt MacDanald	Oliont Instruction	Brian Currio	11-Aug-11	25-Aug-11	Derign Acceleration - Convert	Accelerate during the side valid design with the Hallmain gar are:  -A-E. and Farry Have Courted any parroll the Hallmain gar are:  -A-E. and Farry Have Courted any state of the Hallmain gar are:  -A-E. and Farry Have Courted any state of the Hallmain gar are:  -A-E. and Farry Have Courted any state of the Hallmain gar are:  -A-E. The Hallmain and Draw Off and other entires to blue light road access off Little France  -A-E. The Hallmain and Draw Off and other entires to blue light road access off Little France  -A-E. The Large and the Army of the Hallmain and t	Yer	17-Aug-11	Approved	TBC	Mil	Carly to be agreed
	Mott MacDonald	Client Instruction	Brian Currio	06-Jul-11	20-Jul-11	Trunk Souers	Dotormino impact (if any) an existing truckrouers af current reference derign. It is aur derire ta avaid any relacation.	No					Cartr ta be agreed
	Matt MacDanald	Client Instruction	Brian Currio	06-Jul-11	20-Jul-11	A&E Dozign - Conzort	Design to recognize that part of new A+E and Theatre Corridor above could be built by zumenne (Conzert) other than NPD Co. Design zhould incorporate an obviour break point architecturally and earlies are	No					Cartr to be agreed
	Matt MacDanald	Client Instruction	Brian Currio	06-Jul-11	20-Jul-11	Enhanced Kitchen Facility	enhancement of current kitchen facility – NHSL to provide briefing info on thir early next usek.	No					Cartr to be agreed
	Matt MacDonald	Client Instruction	Brian Currie	06-Jul-11	20-Jul-11	Marketing Brachure	Propers a "marketing" brachers with aptional pages to be used for a variety of purposes (internal + external communications).	No					Carty tabo agrood

Figure 15: Example Client Instruction Log

# 8. Budget & Cost Management

### 8.1 Cost Reporting and Control

Cost reporting will be undertaken through a comprehensive Financial Report issued by the Cost Advisers. This report will be issued monthly. A schedule of these dates is to be agreed between the Project Team and circulated by the Cost Advisers.

The content of such cost reporting is to include the following:

- Site Wide development cost update;
- Construction cost analysis;
- Reconciliation with client budget;
- Cash flow statements;
- Potential cost changes identified by the risk process.

# 9. Health & Safety

#### 9.1 Construction (Design and Management) Regulations

During the period up until financial close the CDM client for the project will be NHS Lothian. After financial close the successful NPD organisation will be elected as CDM client and will be responsible undertaking client duties for the construction period which include the appointment of the CDM Co-ordinator and Principal Contractor. The implementation of the CDM Regulations during the Reference Design and NPD procurement stage will comprise:

- The identification and provision of information that relates to health and safety by the designers. This will include identifying key issues within the reference design and also interface issues with the existing RIE and advanced works contracts undertaken by others.
- The development of requirements within the ITPD documentation that will enable the NPD tendering organisations to demonstrate that they have the necessary competence and understanding to undertake the CDM duty holder responsibilities after the NPD organisation has been elected as CDM client.

This will be followed by a review of the submissions as part of the evaluation process:

- The design that is being developed by the NPD tendering organisations is addressing the requirements of the CDM Regulations with regard to designer duties e.g. there is a process for design risk management in place and it is being implemented.
- Reviewing the design that is prepared between the appointment of the NPD organisation as preferred bidder and financial close for health and safety issues.
- There is a "data room" (which will be on BIW) in which all relevant health & safety information will be located this will comprise the pre-construction information that will be transferred over to the NPD organisation.
- Addressing health and safety requirements in any survey or investigation works that are required as part of the project to inform the reference design or the NPD tendering organisations. This will include liaison with Consort and other third parties as appropriate to comply with their site rules and requirements for method statements

### 10.Governance & Audit

#### 10.1 OGC Gateway Reviews

The project will go through Key Stage Reviews (KSR) at certain pre-defined points during the procurement process (based on the competitive dialogue process). These reviews will be implemented at the following stages:

- In advance of OJEU Notice being released
- Pre release of Invitation to submit Final Tenders
- Pre NPD Co Appointment as Preferred Bidder
- Pre Financial Close

The reviews are based initially on self-assessment through the completion by the project team of the KSR questionnaires, this is based on Scottish Government standard questionnaire.

It is still to be determined if the project will undertake a voluntary KSR at the pre- ITPD (Invitation to Participate in Dialogue) stage.

### Summary of KSR:

#### Advance of OJEU Notice:

This review should not be regarded as a pass/fail exercise. It is a tool to assist NHS Bodies to pause, and consider whether they are advanced sufficiently in their project development, considered rigorously project deliverability in order to proceed to issue of a project OJEU Notice to launch their procurement.

Section 1 - Governance

Section 2 - Scope

Section 3 - Stakeholders

Section 4 - Competition

Section 5 - Procurement Risks

Section 6 - Value for Money

### Pre Invitation to submit Final Tenders

At this stage the Board will provide information outlining the proposed approach and methodology, including how they will approach the Competitive Dialogue phase.

Section 1 - Update & Affordability

Section 2 - Value for Money

Section 3 - Commercial Issues

Section 4 - Deliverability

Section 5 - Data Room and Background Information

### Pre Preferred Bidder Appointment

This review is required to check all actions have been taken to secure commitment from the prospective Preferred Bidder, its key contractors and its funders. Clarify the parameters of the commercial negotiations and any outstanding commercial terms. Provide transparency in terms of affordability testing. Establish status of risk profile in order to prevent reallocation of risk or adverse changes to the project risk profile.

Section 1 - Project Update

Section 2 - Affordability / Value for Money

Section 3 - Financial / Risk

Section 4 - Commercial Position

Section 5 - Technical

Section 6 - Deliverability

### Pre Financial Close

The intention of the Pre-Financial Close Key Stage Review will be to assist the Board in considering what needs to be put in place in terms of staffing and resources ahead of the construction and operational stages of the project.

The above is guidance is an overview of Scottish Government Health Directorate guidance.

#### 10.2 AEDET Review

The Achieving Excellence Design Evaluation Toolkit (AEDET Evolution) assists the NHS, Trusts and other health authorities in determining and managing their design requirements from initial proposals through to post project evaluation. The toolkit is questionnaire based covering Functionality, Impact and Build Quality. These three headings are further divided into ten assessment criteria.

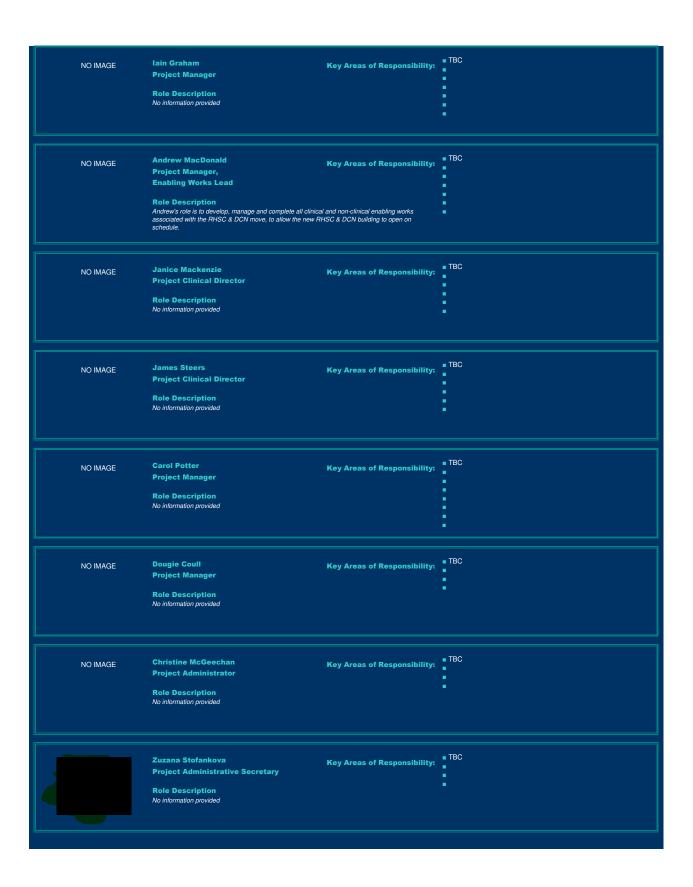
This design evaluation toolkit will be used to define NHS Lothian's briefing requirements on the RHSC & DCN Little France Project and will be revisited periodically to ascertain whether the developing design meets these predefined requirements.

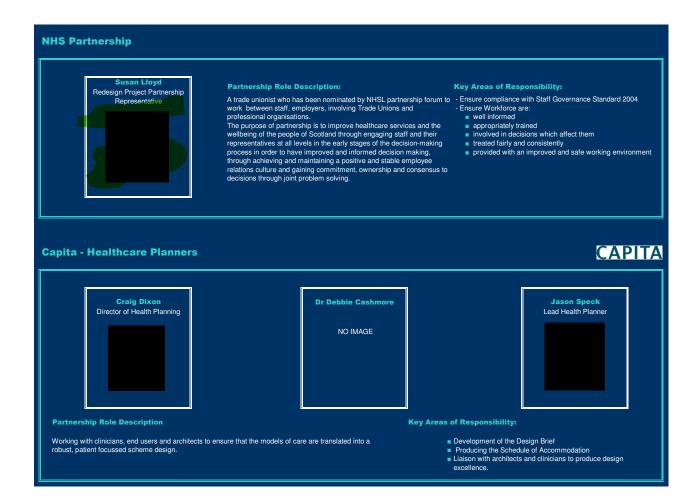
Reviews will be carried out with a representative group of users and other stakeholders at the following stages.

- Initial Briefing Stage
- During Development of the 1:500 Layouts
- During Development of the 1:200 Layouts
- Completion of the Reference Design
- During dialogue with the Preferred Bidder
- Post Project Completion ie Operational Phase

# **Appendix A**

NHSL Team		Team Roles	& Responsibilities Overview
NHS Lothian			NHS
NO IMAGE	Jackie Sansbury Director of Strategic Planning and Modernisation  Role Description Jackie is an executive member of the NHS Lothian Board wit Planning and Modernisation. In addition she is a member of and has wide participation in reviews of services at national I	the National Planning Directors Group	TBC
	Brian Currie Project Director, Commercial Lead  Role Description Brian is responsible for directing the project management of	Key Areas of Responsibility: the RHSC & DCN Little France project.	Leading Development Control Plan 1:1000/1:500  Leading Corporate Governance  Consort Negotiations Liaison  Commercial Lead with Sorrel Cosens  Overseeing the project overall
	Fiona Halcrow Service Project Manager  Role Description No information provided	Key Areas of Responsibility:	Leading Clinical Operational Briefs; Departmental Layouts 1:500; General Arrangements Plans 1:200; General Arrangement Elevations and Sections; Generic Room Layouts 1:50; Key room Layouts 1:50; Decontamination and Control of Infection [HAI-SCRIBE]; Corporate Design Register; ICT Strategy; Clinical Service Planning  Supporting Schedule of Accommodation; Room Data Sheets; Fire Strategy; Interior Design Concepts; Fire Strategy Drawings 1:200; Lighting Aesthetics
	Neil McLennan Capital Planning Project Manager, Reference Design Project Interface Role Description No information provided	Key Areas of Responsibility:	Leading Schedule of Accommodation; Room Data Sheets; Fire Strategy; Fire Strategy Drawings 1:200      Supporting Departmental Layouts 1:500; General Arrangements Plans 1:200; General Arrangement Elevations and Sections; Generic Room Layouts 1:50; Key room Layouts 1:50; Flexibility and expandability; Decanting, Phasing; Security Strategy; Lift Usage Traffic Assessments; Corporate Design Register; ICT Strategy; Clinical Service Planning; PFPI + Communication
NO IMAGE	Sorrel Cosens Project Manager, Business Cases & Commercial Lead  Role Description No information provided	Key Areas of Responsibility:	Leading Non-Clinical Operational Briefs; Wayfinding Strategy; Flexibility and expandability; Decanting, Phasing; Security Strategy; Lift Usage Traffic Assessments; Clinical Enabling in RIE; PFPI + Communication      Supporting Equipment Schedules; Supplies, Storage, Distribution and Waste Management [Soft FM]: BREEAM, Traffic Impact Assessment and Traffic Management Plan; Energy Strategy + Schedules of Power, Heating and Cooling Loads; Commissioning and Testing; Non-Clinical Enabling
NO IMAGE	Graham Gillies Capital Planning Project Manager, Equipment Lead  Role Description  D&C: Responsible for liaising between NHS Lothian and the workstream is aware of the NHS Lothian requirements and treflects the requirements of NHS Lothian.  NHSL: No information provided		■ NHSL  • Leading Equipment Schedules; Interior Design Concepts; Supplies, Storage, Distribution and Waste Management [Soft FM]; BREEAM; Geotechnical Site Investigation; Traffic Impact Assessment and Traffic Management Plan; Construction Strategy; Arch Civ/Struct Specifications; Services Infrastructure Plans 1:1000/ 1:500; Integration of new and existing services; M&E Strategy drawings and statements; Plant Room Layouts; Energy Strategy + Schedules of Power, Heating and Cooling Loads; Engineering Design Philosophy; Life Expectancies; M&E Eng Specifications; Commissioning and Testing; Lighting Aesthetics  • Supporting Waylinding Strategy; Decontamination and Control of Infection [HAI-SCRIBE]; Clinical Enabling in RIE  ■ D&C  • Liaison with the full D&C work-stream  • Review of D&C documentation for compliance with NHSL requirements  • Liaison within NHS Lothian on all matters relating to the D&C requirements



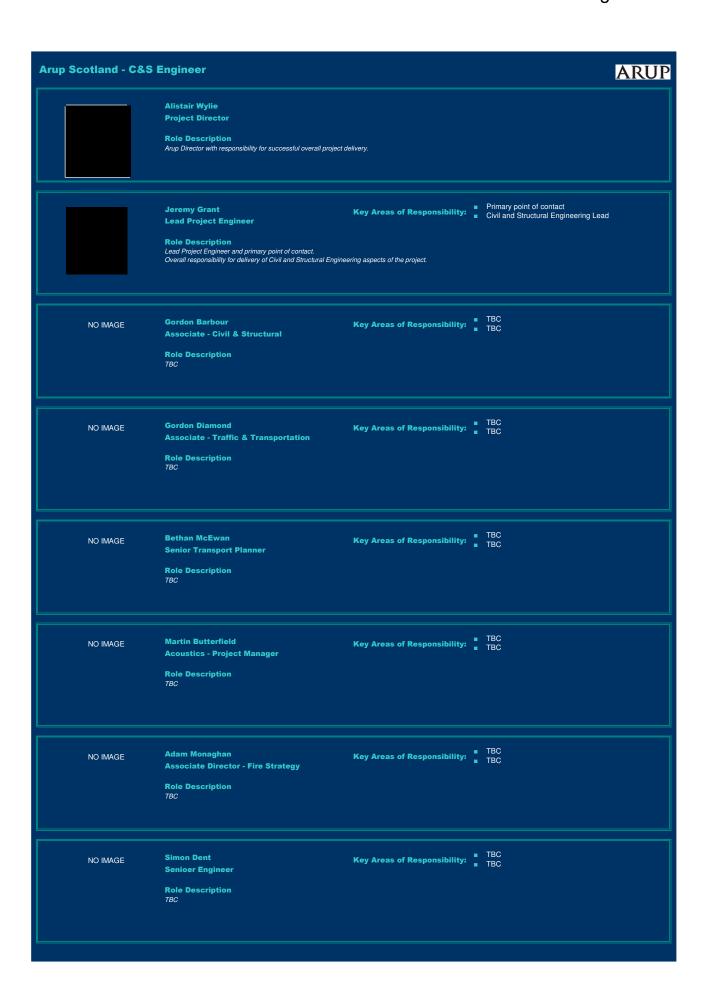


# **Team Roles & Responsibilities Overview Technical Advisory Team** Davis Langdon 🔿 **Davis Langdon - Project Manager** Key Areas of Responsibility: Client Liaison Procurement Strategy NPD Peer Review NPD Advisory Service Service Delivery Quality Assurance Kevin Bradley Director in charge of the NPD project with overall accountability for the successful delivery of the project. As NPD Peer Review, Kevin is responsible for reviewing key documents and project deliverables associated with procurement through to construction and operation of the New Key Areas of Responsibility: Project Communications Project Reporting Programme Review Fraser McQuarrie Associate - Lead Project Manager Primary interface and first point of contact for the Project Director on all day-to-day issues affecting the project and principal liaison with the Commission Director and Commission Manager. Responsible for the overall project governance, structures, processes, lines of communication, programme monitoring and reporting. Also responsible for the co-ordination of all work streams under the NPD process. Key Areas of Responsibility: Programme Management and Monitoring Project Co-ordination Project Communication Project Reporting Supporting the Work-Stream interfaces Project Management Project Management and Monitoring Senior Project Manager Supporting the Project Management team in terms of project wide liaison and management across the project work-streams. Responsible for routine reporting to the Project Management Executive via the Lead Project Manager. Project Management Administration Management of Project Information & Control Tools including Action/Issue Schedules, Meeting Matrix, Project Directory, PEP and associated Project Co-ordinator scriedules, Meeting warms, Project Directory, PEP and associated documents Preparation of monthly Project Board Report System Administration for BIW, including maintenance of the Project Calendar A key interface and co-ordination role between the Project Management Executive and the wider Delivery Team. Responsible for the collation and maintenance of key project information to produce reference material for the purpose of monitoring and controlling the project. Key Areas of Responsibility: ■ Overall responsibility for the Reference Design ■ Management and co-ordination of the design ■ Change Control – design element only ■ Interface with NHSL clinical user groups and stakeholders ■ Interface with To parties – CEC Planning and A&DS etc ■ M&E Design Manager Role Description Responsible for leading and managing the Reference Design team, including all sub-consultants and advisors, to produce a cohesive design. Responsible for the co-ordination of all design elements during the Reference Design stage and is the key interface between NHSL clinical and estates user groups and the design team. Key Areas of Responsibility: Procurement Programme Preparation & evaluation of POQ submissions Invitation to Partake in Dialogue (ITPD) documentation Arrangement of Bidders conference Development of Competitive Dialogue Strategy Compilation of Competitive Dialogue Documentation Evaluation of Competitive Dialogue Total Competitive Dialogue Documentation Evaluation of POQ submissions **Role Description** Role Description Reporting to procurement lead on all day-to-day issues relating to the development and preparation of NPD procurement documentation and process. With input into the overall project, processes, programme nonlibring and reporting. Performing a key role in procurement under the NPD process. Responsible for input into and the development and preparation of: Associate - Procurement Manager Role Description Reporting to procurement lead on day-to-day issues relating to the development and preparation of VPD procurement documentation and process. With input into the overall project, processes, programme and monitoring and reporting, a role in procurement under the NPD process. Very a very development and propentiation of The Development and project, procurement documentation and process. With input into the overall project, processes, programme monitoring and reporting. Performing a role in procurement under the NPD process. Responsible for input into and the development and preparation of: \*\*Arrangement of Competitive Dialogue Documentation on Development and finalisation of TSPE documentation and Management and finalisation of TSPE documentation. Key Areas of Responsibility: Assistance in the development of FM Service Level Specifications Advice on FM Costings Media March 19 Cocumentation (evaluation of responses.) Minput into POO documentation Minput into tender documentation Minput into competitive dialogue process Evaluation of FM tender technical and commercial responses Simon McLaughlin Froviding an advisory service to the FM Work-stream, part of the core team responsible for the delivery of facilities requirements for this project. Technical adviser on Facilities Management issues covering the following key areas:









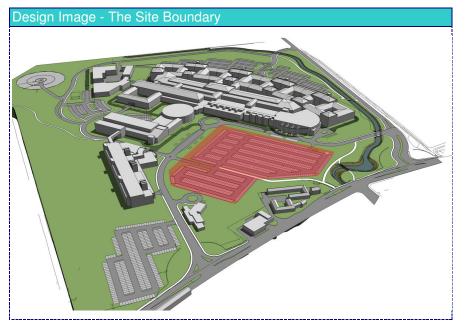
# K **Hulley & Kirkwood - Services Engineer** M&E project planningStakeholder management and communicationProgramme management Michael O'Donnell NO IMAGE Key Areas of Responsibility: **Project Lead Director** Design management Financial control **Role Description** Michael is a Chartered Engineer and Low Carbon Energy Assessor and will act as Project Lead Director. Change management ■ Project co-ordination Setting out design concepts ■ Strategic design issues in relation to all Electrical Services **David Stewart** NO IMAGE **Key Areas of Responsibility: Project Support Director** Support the Project Lead in all management areas **Role Description**David is a Chartered Engineer who will act as Project Support Director Overseeing the engineering and technical team relating to contract administration, drawing and document NO IMAGE Ronald Nolan **Key Areas of Responsibility: Project Associate** production to required deadlines **Role Description** Ron is a Chartered Engineer who will act as Project Supervisor. Undertake design of detailed dynamic simulation work as part of the Hulley SIM group Contribute towards the Low Carbon resolution and Jonathan McMillan NO IMAGE **Key Areas of Responsibility:** Design Engineer ntification of best Low or Zero Carbon Technology Role Description Jonathan's role will be as Assessor for the BREEAM Pre-Assessment checklist. Drawing productionDrawing issueClient liaison Brian Feeley NO IMAGE Key Areas of Responsibility: **CAD Technician** Technical gueries in relation to CAD design. Role Description Brian will be the main CAD contact. Michael Bryan NO IMAGE **CAD Technician Role Description** Michael will support Brian in all aspects of CAD matters and will cover client liaison and technical issues in his absence **Montagu Evans - Planning Consultant** MONTAGU EVANS ■ Providing planning advice Fraser Littlejohn **Key Areas of Responsibility:** Co-ordination of the preparation and submission of the application for planning permission in principle Primary liaison with the City Development department of the City of Edinburgh Council Lead Consultant **Role Description** Acting as planning advisers to NHS Lothian in relation to the proposed development. Providing planning advises to the application for planning permission in principle, including in relation to planning conditions and any legal agreement, and the wider planning process The City of Edinburgh Council Project management of the planning application process Providing planning advice Co-ordination of the preparation and submission of the application for planning permission in principle Primary liaison with the City Development department of the City of Edinburgh Council Project management of the planning application **Andrew Munnis Key Areas of Responsibility: Lead Consultant** Acting as planning advisers to NHS Lothian in relation to the proposed development. Providing planning advice on all aspects of the application for planning permission in principle, including in relation to planning conditions and any legal agreement, and the wider planning process

# **Appendix B**



# Royal Hospital for Sick Children & Department of Clinical Neurosciences | NPD Project Board Report | 13th May 2011 relage 258





# Executive Summary

### Time

- A First Draft Strategic Programme follows indicating an operational date of May 2017 assuming a start on the reference design process on 16th May 2011. The critical path generating this period of some 6 years is the creation of a reference design, the completion and approval of an OBC, the successful selection of three bidders following a PQQ process through the OJEU, a Dialogue process to select a preferred bidder and eventual construction and commissioning. Satisfactory conclusion of all relevant issues with Consort Healthcare prior to submission of OBC is also essential.
- It should be noted that this programme will be under continuous review and any opportunity to bring forward the final operational date will be taken.
- Work is underway to develop and agree detailed programmes for all work-streams supporting this Strategic Programme and many more tasks and dependencies will be added during the next few weeks.

### Cost

■ A full cost update will follow in future Project Reports once sufficient information is available. This will build on the early cost forecasts contained within the Addendum to OBC issued to SGHD on 23rd March, 2011

### Quality

- The Technical Advisor and Financial Advisor have been successfully procured using the OGC Buying Solutions Framework and a team structure is attached identifying key named individuals. Unfortunately, a co-located project team office is not possible given financial constraints and the team will be based primarily in Mott MacDonald's and Davis Langdon's offices with clinical interface at Rillbank Terrace. A Legal Advisor remains to be secured.
- Project Governance procedures in relation to the Corporate Requirements, Project Team and Project Processes will be covered in the PEP (Project Execution Plan) currently being finalised for distribution and comment.
- A Project Brief comprising Operational Requirements, Adjacency Matrix, Accommodation Schedule and Assumptions has been prepared by NHSL and will be released to the designers on 16th May, 2011. However, much work remains to be done on associated work-streams necessary to close out essential clinical enabling works within the RIE.
- The Reference Design main deliverable is an approved architectural design fully illustrating clinical functionality in three dimensions with all known site and infrastructure constraints clearly stated. This design whilst being entirely credible in structural, fire and building services engineering terms will not seek to dictate solutions in this regard. The design team are currently developing the complete schedule of deliverables with NHSL whilst commencing the design process.
- The design process particularly in relation to the engagement with clinical and client management teams has been prepared and builds on the work done over the last 18 months (copy attached).

# **Technical Advisor Commentary**

- The appointment of MML through the Buying Solutions Framework has now been completed with only the final wording of the Parent Company Guarantee to be agreed. The Sub-Consultant Agreements for TG and TTPM have been finalised. The agreement for the appointment of DL is to be finalised w/c 9 May 2011. Fee proposals have been received from the proposed Reference Design Team. These appointments to be made through DL will be finalised upon agreement of scope with the exception of the Healthcare Planning appointment which is to be subject to a further tendering exercise.
- The TA team has commenced work in developing the procurement programme and establishing the terms of reference for each of the work streams. The TA team also attended a workshop with NHSL on 3 May 2011 examining the programme for the procurement phase and agreeing the approach to developing roles and responsibilities for the Work-stream. The project execution plan is approximately 60%. MML has been working with NHSL to develop and agree the brief for the Reference Design.

# Stakeholder Management and Communication / Strategic and Workforce Planning

- Staff Open Sessions programmed to commence w/b 9 May 2011.
- Re-provision Workforce Task Group meetings have been postponed since the latter stages of 2010. These will re-commence once project fully underway.







# Clinical Update / Equipment

- Adjacency Relationship Matrix work being progressed with services.
- Draft Schedule of Accommodation prepared.
- Work progressing with the review of clinical and non-clinical operational procedures.
- Request with the TAs to finalise the 1:50 Detailed Design Process of the stand-alone building to allow completion of the Room Data Sheets.
- Reference Design Structure (NHS Lothian Internal) finalised and Sub Task Groups identified. Lead and Deputies being formalised.
- DCN equipment lists are being pulled together at this stage using the RHSC ADB sheets. Meetings will be arranged with users to confirm equipment.
- Meeting arranged with Capital Planning Equipment manager to pull together costs for equipment.

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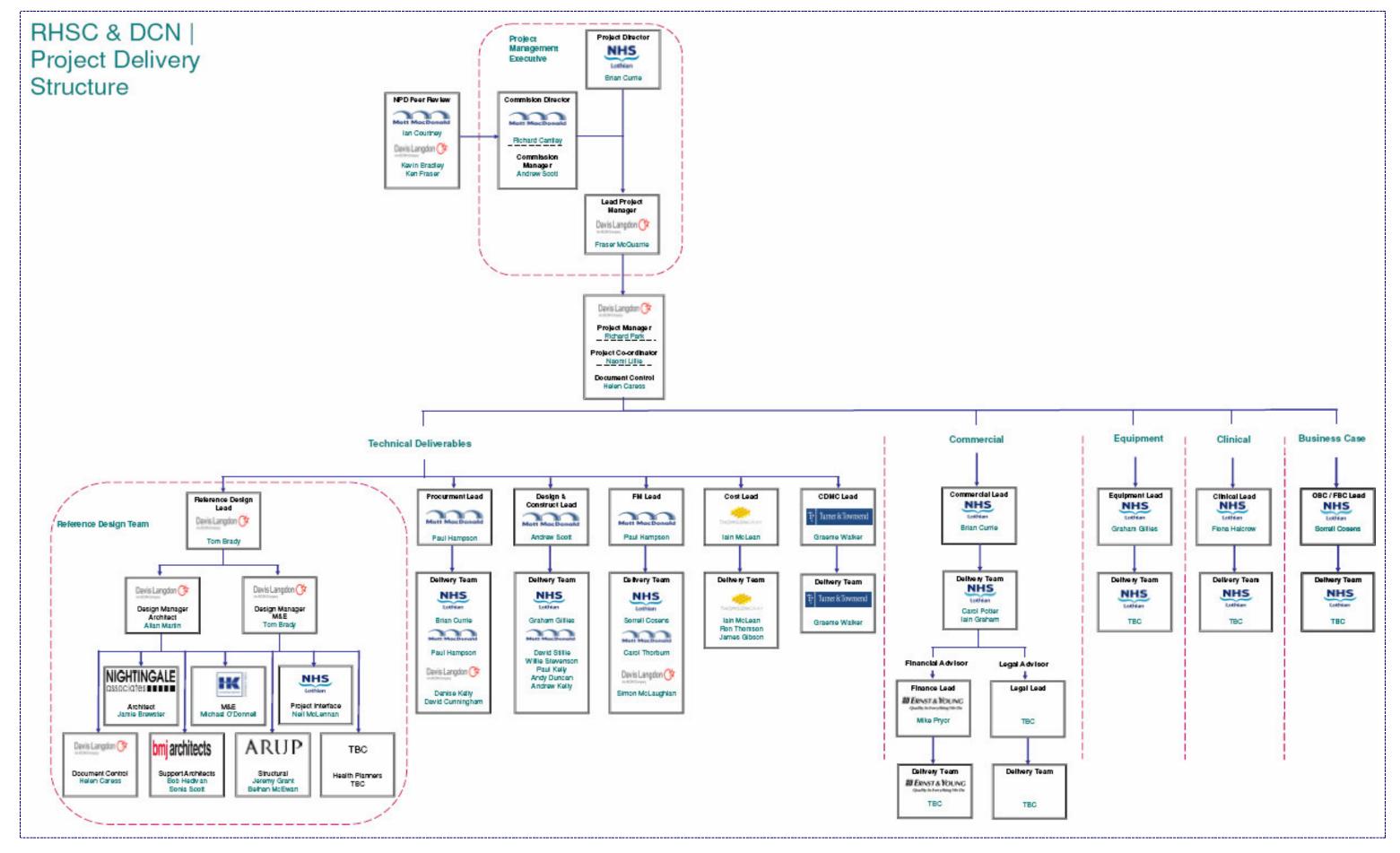
HFS - RHSC stand-alone scheme key milestones							
Concept Design - 1:500 sign off	08/03/2010						
Scheme Design - 1:200 sign off	30/07/2010						
Detailed Design - 1:50 sign off	20/11/2010						
Cost Plan sign off	28/01/2011						
Planning Submission	08/11/2010						
Submit FBC to NHSL	07/02/2011						
FBC Approval by NHSL	07/02/2011						
Submit to CIG	08/03/2011						
CIG Approval	14/03/2011						
Construction Start	01/06/2011						
Construction Work Complete	09/09/2013						
Hospital Going Live	29/11/2013						

NPD - RHSC & DCN key milestones						
Reference Design Brief	02/05/2011					
Concept Design 1:500 & Approvals	23/05/2011					
Scheme Design 1:200 & Approvals	26/09/2011					
SGHD Approval of OBC	15/11/2011					
SGHD Approval of FBC	07/01/2014					
Planning in Principle Granted	22/11/2011					
Detailed Planning Granted	13/11/2013					
Car Park B Transfer Deadline	21/12/2011					
Project Information Notice	22/09/2011					
Bidders' Day	26/01/2012					
Release OJEU Notice	16/11/2011					
PQQ Period	26/01/2011					
Select Short-list Bidders	03/05/2012					
CD – Open Dialogue	07/05/2012					
CD - Interim Process	10/05/2012					
CD - Final Tenders	07/12/2012					
CD - Evaluation	22/02/2013					
Appoint Preferred Bidder	15/07/2013					
Commercial Close	10/09/2013					
Financial Close	19/02/2014					
Construction Start	01/03/2014					
Construction Work Complete	01/03/2017					
Hospital Going Live	01/05/2017					















# Royal Hospital for Sick Children & Department of Clinical Neurosciences | PM Report | 13th May 2011

# Reference Design

- DL approached the design team that worked on the previous stand alone RHSC scheme to appoint them directly as the Reference Design Team which would be 'ring fenced' in order not to preclude them from joining a bid team further down the procurement line.
- DL has now been given commitment from all designers that they do wish to join the Reference Design Team and have now submitted fee proposals to DL for acceptance.
- DL is currently liaising with the design team in regards to appointing them contractually on a back-to-back basis.
- DL has been asked to fulfil the management role previously undertaken by BAM to lead the design process. DL has appointed Tom Brady and Allan Martin as the design management team.
- NHSL requested a separate document-controller for the design process. This role will be undertaken by Helen Caress from DL.
- The Design Team has produced a programme showing a 12 month duration to complete the Reference Design, based on the schedule of deliverables issued via NHSL on 13/04/11 and on three rounds of consultation meeting with the clinical staff. This is currently being looked at in order to reduce the timescale to an eight month period, one agreement being that clinical consultation will be reduced to two rounds.
- NHSL has asked that the design team complete the 1:50 design stage from the previous RHSC stand-alone scheme; once appointed, DL will instruct accordingly.

### Procurement

• An initial NPD Procurement meeting is being held on 11 May 2011 to discuss the NPD documents. In the interim, members of the Work-stream have been advising and agreeing the logic for the procurement programme and identifying issues that will require clarification and guidance for the legal advisers once appointed.

# Design & Construct

Information to follow once project fully underway.

# acilities Management

Information to follow once project fully underway.

## Health & Safety / CDMC

 An F10 notification for the project will be raised with the Health and Safety Executive shortly to reflect the details of the new project.

## Commercial

This section will be populated by Ernst & Young in conjunction with NHSL Finance when a sufficient level of information becomes available from the reference design process.

# Business Case

An Addendum to OBC was issued to SGHD on 23rd March 2011 and comment / query has been received. The relevant points, with the exception of some financial issues, have been dealt with.

# Key Activities over the next 4 weeks

- Appoint TA support team MMc
- Appoint Reference Design Team DL
- Issue revised PEP DL
- Agree strategic programme All
- Finalise new meeting matrix DL
- Finalise new roles & Responsibilities DLComplete project brief and operational policies NHSL
- Complete 1:50 exercise for previous stand-alone scheme DL
- Refine design deliverables NHSL/MMc
- Conclude Consort negotiations SA6 NHSL

# Project Administration

- The draft PEP can now be issued. DL awaiting input from other parties of the TA and NHSL teams.
- BIW web portal has now been established for the new joint RHSC & DCN scheme.
- Meeting held on 10th May between DL and NHSL to agree a Meeting Matrix.
- DL to issue new Project Directory.
- Design Team meetings will be held in DL Edinburgh office, work-space will be made available exclusively for the Design Team.

# Enabling Works

### **Project Management**

Car-park F bio-quarter plots 14-16 - This will provide 1,200 car parking spaces. Completion date is 17/06/2011, the project is on-target and within budget. There were initial delays due to poor weather over winter, but this should be absorbed. The most significant risk was temporary works to HV cables - these caused slight delay which has been absorbed in the programme and the issue closed out.

# Consort

- Car Park F enabling work The contractor is continuing to construct the bridge from the existing RIE site into the new car park F. Work is on programme for completion for the 17/6/11.
- Car Park F The contractor is making reasonable progress with the car parking spaces, pavements and roads. The second bridge is also on schedule to be completed on the 17/6/1. The burn diversion is complete and the SUDs basin will be complete by the end of the week.
- Car Park B Diversions work The contractor is slightly behind with the gas mains diversion. This is down to problems with locating the deep existing pipe work. The rest of the work is moving along to schedule.

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not disclosable under the Freedom of Information (Scotland) Act 2002





# **Appendix C**

# **Contract Control Order No**

290961/

# Title

# **Dated**

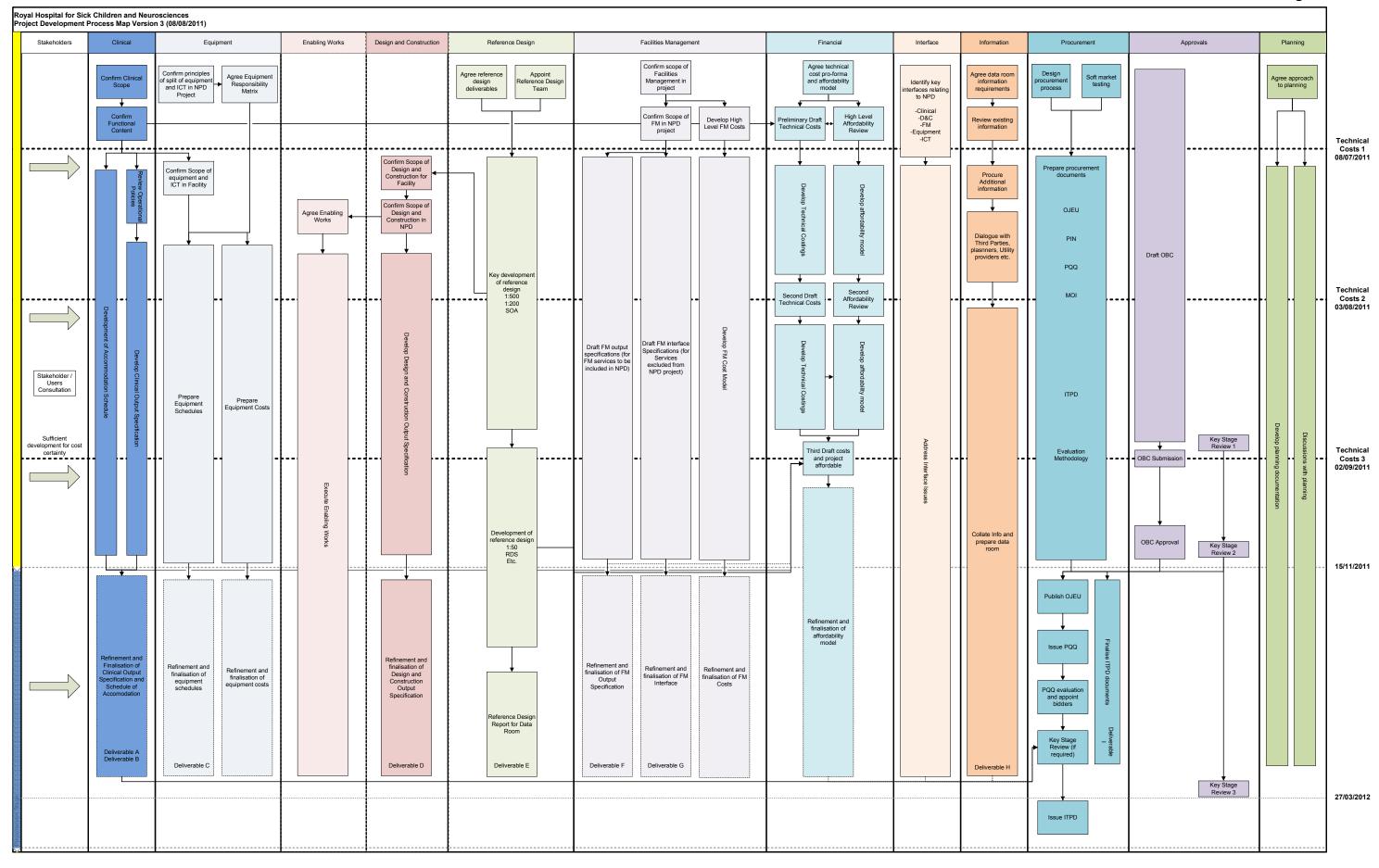


Project Title	NPD Project for RHSC/DCN	at Royal Infirmary Edinburgh for NHS	S Lothian	
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Consequentia	al Changes			
Effect on Pro	gramme / Schedule			
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information and	details will be provided in due	nformation and record. Please sign a course. Please provide your commer approval to proceed with the above ch	nts in writing within 10 days	
Signed for Mott I	MacDonald Limited	Signed for NHS Lothian	_	

		Page 264
Date:	Date:	

Distribution: NHSL (PD,PM); Relevant Sub Consultants; MML (PD,PM,PPW,Relevant Staff, PiMS CC)

# **Appendix D**



Technical Costs 1 – Agreement of format of costing pro-formas and initial indication of "ball park" figures.

Technical Costs 2 – 1st formal draft technical costs based on detailed work carried out to that date.

Technical Costs 3 – 2<sup>nd</sup> formal draft technical costs based on detailed work carried out sufficient for OBC purposes.

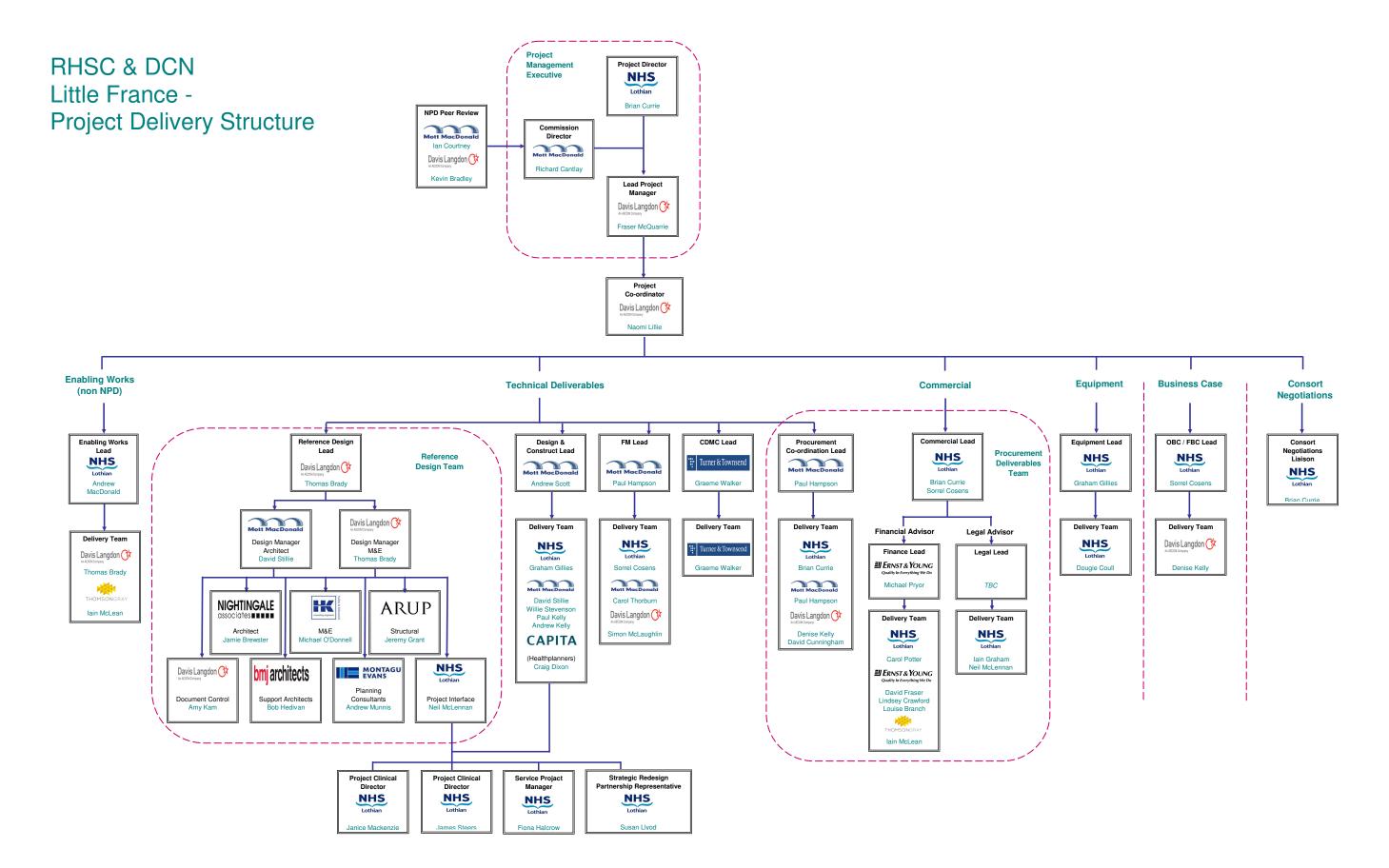


# **Appendix E**

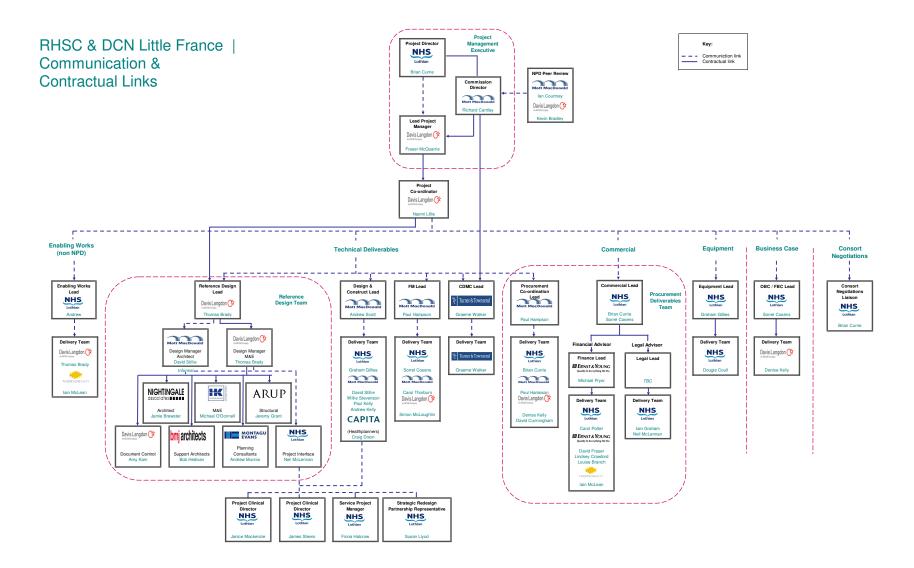
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Frequency:	F	М	2-M	М	3-M	F (to Dec 2011)	TBC	W (to end July 2011)	F	F	A/h	F	F	F	F
Meetings Scheduled in BIW:															
Key to initials:  N = Weekly = Fortnightly M = Monthly Q = Quarterly A/h = Ad hoc C = Chair A = Attendee A(r) = Attendee, as required D = Organiser / primary point of contact D = Included in distribution for information	Project Management Executive	Work-stream Progress	Commission Management (finance admin)	Risk	Peer Review	Design Work-stream	BREEAM Strategy	Town Planning	Procurement Co-ordination Work-stream	D&C Work-stream	Clinical & Non-Clinical Enabling Works (non NPD)	FM Work-stream	Commercial Work-stream	Equipment Work-stream	Business Case Work-stream
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# **Appendix F**



# **Appendix G**







# Royal Hospital for Sick Children & Department of Clinical Neurosciences at Little France Project NHS Lothian



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# Document Issue

Issue:	File Path:	Date:	Prepared:	Checked:	Reviewed:
1	Stored on BIW	01.06.2011	RP & NL	FMcQ	To be reviewed by all leads
1.1	N/A	12.08.2011	RP	AM	Internal Review
1.2	N/A	19.08.2011	RP	RC	Internal Review
1.3	Stored on BIW	23.08.2011	RP	FMcQ	Issued to NHSL for SFT Review
2.0	Stored on BIW	06.09.2011	RP	FMcQ	Issued to NHSL and Work- stream managers
2.1	Stored on BIW	28.09.2011	NL	-	Issued to Business Case Lead for inclusion in OBC

# Schedule of Revisions

Revision:	Date:	Details of Revision:	Revised By:
Draft 1.	01.06.2011	Updated draft for review / comment	RP
Draft 2.	06.09.2011	Update to reflect feedback and project status	RP

# 1. Introduction

#### 1.1 **Project Name**

The name of this project is Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France, and is abbreviated to RHSC + DCN - Little France.

#### 1.2 **Purpose of the Document**

This Project Execution Plan (PEP) is intended to impart to all parties involved in the project a clear understanding of how they interact with each other, and sets out the governing strategy, organisation, control procedures and roles and responsibilities for the project. The document provides a concise introduction to the project for new team members in terms of how the project will be delivered.

It is intended that this document will be a working document, amended and further developed during the progression of the project, with revisions issued as appropriate. Davis Langdon, an AECOM Company (DL), will be responsible for developing the document with input from the various parties of the project.

All parties involved in or associated with the project are requested to comply with the contents of this PEP. Any issues which may result in necessary amendments, amplifications or improvements to practices or procedures contained herein should be raised for discussion with all parties.

### **Precedence of Document**

If any matter within this document is at variance with any Contract or Agreement signed by NHSL Board relating to the execution of the works, then that which is contained within such Contract or Agreement will be deemed to take precedence. Any such variation should be reported to DL in order for the necessary amendments to be made.

### 1.4 **Acronyms and Abbreviations**

A&E	Accident and Emergency
AEDET	Achieving Excellence Design Evaluation Toolkit
CA	Company Administrator
CAMHS	Children and Adolescent Mental Health Services
CIG	Capital Investment Group
CDM	Construction Design Management
C&YP	Children and Young People
DCN	Department of Clinical Neuroscience
DL	Davis Langdon, An AECOM Company
ENT	Ears, Nose & Throat
EY	Ernst & Young
FBC	Full Business Case
MM	Mott MacDonald Limited
NES	National Education Services Scotland
NHSL	National Health Service Lothian
NPD	Non Profit Distribution
NSD	National Services Division
NSD MCN	National Services Division Managed Clinical Network
OBC	Outline Business Case
OGC	Office of Government and Commerce
PAA	Paediatric Acute Admission and Assessment Unit
PEP	Project Execution Plan
PFPI	Patient Forum and Public Involvement

PIC	Project Information Co-ordinator			
PME	Project Management Executive			
PSC	Professional Services Contract			
REH	Royal Edinburgh Hospital			
RHSC	Royal Hospital for Sick Children			
RDT	Reference Design Team			
REH	Royal Edinburgh Hospital			
RIE	Royal Infirmary Edinburgh			
SFT	Scottish Futures Trust			
TG	Thomson Gray Partnership			
TT	Turner & Townsend			
WGH	Western General Hospital			

# 2. Project Introduction

#### 2.1 **Background**

The NHSL Property and Infrastructure Strategy published in 2007 recognised that the RHSC and DCN require significant modernisation to ensure an appropriate environment for the provision of high-quality paediatric and neuroscience services. Physical building and site constraints, together with practical phasing difficulties, limit the ability to achieve such modernisation in a successful and cost effective manner on the current respective sites.

### **RHSC**

The RHSC facility is rated as being 47% non-compliant with fire standards and 56% non-compliant with other statutory and nonstatutory standards. 48% of the property is in an unacceptable physical condition and, in terms of functional suitability, 13% is deemed to be unfit for its present purpose. 6% of the hospital is recorded as overcrowded.

### DCN

In February 2008 the Scottish Government endorsed the recommendation of the Neurosciences Implementation Group that adult neurosurgery continues to be provided in Aberdeen, Dundee, Edinburgh and Glasgow. 1 These services would be consolidated under a single management structure for Scotland; NHS Lothian is fully engaged with the national Managed Service Network for neurosurgery.

The re-provision of the Royal Hospital for Sick Children and Department of Clinical Neurosciences, within a combined facility at Little France, is a key part of the NHSL Board Strategic Capital Investment Programme. NHSL Board has decided to procure the project through the Scottish Government Non Profit Distributing model.

The new building will be located at the Royal Infirmary Edinburgh (RIE) on the Little France site.

### 2.2 The Project Brief and Scope

### RHSC Existing Facilities Overview 2.2.1

The Royal Hospital for Sick Children, Edinburgh, is currently based at Sciennes, near Edinburgh city centre. It was originally built in 1895 and has had several structural developments over the last 100 years. The Hospital and many of the surrounding houses, which are owned by NHSL or by NHSL Endowments, are listed buildings.

The services that at present are provided by the Royal Hospital for Sick Children site are:

Children's services provided in RHSC				
A&E	Haematology / oncology	Ophthalmology		
Ambulatory paediatrics	Inherited metabolic disease	Paediatric Liaison psychiatry / psychology		
Audiology	Paediatric Intensive Care	Paediatric Pharmacy		
Anaesthesia	Paediatric High Dependency	Paediatric physiotherapy		
Burns	Infectious diseases	Paediatric Radiology		
Cardiology (inpatient facility in Yorkhill)	Intensive Care Retrieval (NSD contract)	Paediatric Respiratory medicine		
Child protection	On-site laboratories – haematology / biochemistry	Renal medicine (outreach from Yorkhill)		

<sup>&</sup>lt;sup>1</sup> Neuroscience Implementation Group (2008): Report to Cabinet Secretary for Health and Wellbeing

Chronic pain service	Maxilo-facial surgery	Paediatric Rheumatology (outreach from Yorkhill)		
Cleft lip and palate surgery (NSD MCN)	Paediatric medicine	Pain Management		
Day surgery	Neonatal surgery	Speech and language therapy		
Paediatric Dietetics	Neurosciences (neurology / neurophysiology/neurosurgery)	Paediatric general surgery		
Endocrinology & diabetes	Occupational therapy	Paediatric spinal deformity surgery		
Genetics	Oral surgery	Specialist neuro-developmental paediatrics		
Gastroenterology	Out patient services	Theatres		
Services shared with adult service but provided on-site at RHSC				
Dentistry	Neurosurgery	Orthotics		
Dermatology	Orthopaedics	Plastic surgery		
ENT				

The current 12-bed CAMHS inpatient unit is located in the Young People's Tier 4 Unit on the Royal Edinburgh Hospital (REH) site, adjacent to the regional forensic unit. It incorporates 12 single rooms in 3 groups or 'pods'. Designed around the idea of a therapeutic community, the unit imposes major constraints on staff wanting to provide modern treatment and care. In particular the current facility only has one communal area with all the bedrooms opening into this area. Privacy is therefore significantly compromised.

Day children's services are currently based at Forteviot House, Hope Terrace and comprise 2 Victorian villas which have been connected together.

# 2.2.2 DCN Existing Facilities Overview

The Department of Surgical Neurology opened in a purpose-built facility in the Western General Hospital (WGH) in 1960. It had 60 beds and 2 dedicated operating theatres designed by the internationally renowned neurosurgeon Norman Dott. Neurology was based at the Northern General Hospital at this time, with 30 inpatient beds.

The facility was re-named the Department of Clinical Neurosciences in 1987 when neurology moved to WGH, and then comprised 48 neurosurgery and 24 neurology beds.

In 1990 the DCN theatre complex was developed to meet Royal College of Anaesthetists standards for training and best clinical practice. The original theatres remain, with updated anaesthetics rooms, recovery beds and other support accommodation.

Until the early 1990s neurosurgical trauma was based at the Royal Infirmary of Edinburgh (RIE), with a dedicated trauma theatre, critical care facilities and inpatient ward. In 1991 these services moved into the DCN at WGH, with an overall reduction in NHS Lothian neuroscience beds of 19 and a concentration of all neurosurgery into two operating theatres.

In 1996 DCN was expanded to include a dedicated outpatients department, teaching and office accommodation. DCN now holds other outpatients' clinics in various locations on the WGH site as the 10 consulting rooms are no longer sufficient.

Prior to 1997 the population served by the DCN was approximately 1 million, covering the Lothians, Fife and the Borders, but this has expanded considerably in the last 12 years to a base population of 1.8 million to include Dumfries and Galloway and part of Forth Valley.

The services that at present are provided by the Department of Clinical Neurosciences are:

Neurological services provided in DCN			
Chronic Pain Service	Diagnostic Neuroradiology	Dietetics	
Edinburgh Centre for Neuro- oncology	Neurosciences High Dependency Unit	Health Records	

Interventional Neurovascular	Neurology	Neurophysiology	
Radiology			
Neuropsychiatry	Neuropsychology	Neurosurgery	
Occupational Therapy	Outpatients Department	Pre-Admission Clinic	
Programmed Investigation Unit	Physiotherapy	Speech and Language Therapy	
Theatres and Anaesthesia			
Shared services provided on-site at DCN			
Neuroradiology	Neurophysiology		

### 2.2.3 Summary of Client Brief

The new combined facility will be sited at Little France. The gross floor area of the new combined build as detailed in the feasibility study is estimated at approximately 50,000 square metres (m²). The RHSC project has an approved OBC and was based on procurement through Framework Scotland. The design for this stand-alone facility was well advanced and three rounds of user-groups meetings had been conducted resulting in the sign-off of a design to 1:50 detailed design stage (equivalent to RIBA Stage E). The DCN project is not as developed, either in terms of design or business case production. Outline design information, including Schedules of Accommodation, has been developed in order to support a draft OBC. As part of the Scottish Government 2010-2011 Budget announcement, the RHSC and DCN schemes were announced as forming part of the new NPD pipe-line. Consequently, clinical and building elements of the previously proposed stand-alone buildings will now be combined.

### 2.2.4 Strategic Objectives

The anticipated outcomes and benefits from the development are:

### In-patient & Ambulatory Care Services

- Co-location with acute adult, maternity and neonatal services where the support of clinicians from across different specialities will be available. The provision of a purpose-built state-of-the-art Children & Young People's (C&YP) hospital with improved facilities and an appropriate environment for children, young people, families and staff;
- An expanded 'front door' service (including a Paediatric Acute Admission and Assessment Unit (PAA) that links with primary care and unscheduled care services, and therefore supports service redesign and sustaining national targets for reducing waits and delays in A&E);
- High-quality clinical care for patients that is timely, accessible and consistently available;
- Sustainable core and specialist emergency and elective service, and local, regional and national services;
- Improved planning and processes for patient transition from paediatrics to adult services, leading to improved pathways of care for patients and families;
- The synergy of having co-located adult and paediatric services providing significant additional research and development opportunities for children's services;
- Support the effective delivery of teaching and education through co-location of the hospitals located at Little France, the Medical School and the Bio-medical Research Park on one site;
- Retention of children's neurosurgical service which depends on the co-location of the adult neuroscience service.

# Children & Adolescent Mental Health Services

- Improved patient care for C&YP with both mental health and physical illnesses. Physical co-location will support faster diagnosis and treatment;
- Professional benefits to CAMHS staff and paediatricians of working alongside each other, reducing the risks of professional isolation and improving the dialogue between colleagues;
- Suitably designed premises enabling staff to work effectively when treating young people with serious mental illness;
- Reduction in the stigma young people associate with mental illness by being treated on the same site as all other children and young people.

### Department of Clinical Neurosciences

[NB Section to be developed - DCN outcomes and benefits of a combined facility not considered within draft OBC.]

## 2.2.5 Project Parameters and Key Issues

One of the key constraints of this project is that the footprint and massing of the hospital will be constrained by existing buildings, services and infrastructure on the RIE site. These include:

- Physical Link connection to the A&E department within the RIE hospital;
- Road Network potential realignment of the existing network may be necessary to maintain a workable hospital layout. The potential impact on cars, ambulance / emergency access and buses during construction will be managed;
- Utilities the proposed service strategy will be to create new independent utility supplies including drainage, water, gas, electricity and communications, with the ultimate objective of delivering an autonomously-serviced department;
- Niddrie Burn and Other Water Courses a key constraint to the south and east of the site, together with realignment plans by City of Edinburgh Council to the east;
- Site Conditions data from the RIE development and site investigations on the adjoining land is available, suggesting restrictions in some areas;
- Car Parking the maintenance during construction and the operation of sufficient car parking will require cognisance of the neighbouring developments and planning restrictions. Fully accessible and, where appropriate, managed car parking for the RHSC / DCN patients and staff to be balanced with planning requirements (e.g. Green travel planning) and site capacity limitations. The opportunities for maximising collaboration with neighbouring developments and public transport servicing will be pursued;
- Height the current development plans include a development height restriction of three floors, based on "lines of sight" from Old Dalkeith Road and maintaining the uninterrupted ridges of Craigmillar Castle and Edmonston. The increased building footprint and formation of an independent energy centre and service yard will extend the building constraints and ultimately breach the defined sky-line policy. This will need to be carefully managed with the City of Edinburgh Council Planning department and Architecture and Design Scotland;
- Clinical Services the clinical services at RIE require continued function and cannot be disrupted;
- Access To Existing Amenities and Public Services access to existing services on the Little France site (for patients, staff, visitors, public transport and suppliers) will require to be maintained throughout the project;
- Full Planning Permission yet to be granted for the project and this may be influenced by the permissions required for the
  whole of the Little France future master-planning of the site. This work is underway for Little France incorporating the plans
  for re-provision of the RHSC and DCN. This work has to be aligned to the overall master-plan for the Bio-quarter
  development, and is at an advanced stage. This will have to be considered in full detail in relation to the site-wide traffic
  management strategy.

# 2.3 Project Delivery

## 2.3.1 Overall Project Delivery

The Client has contracted Advisers to support the Project Delivery in the following way:

## RHSC & DCN NHSL Project Delivery

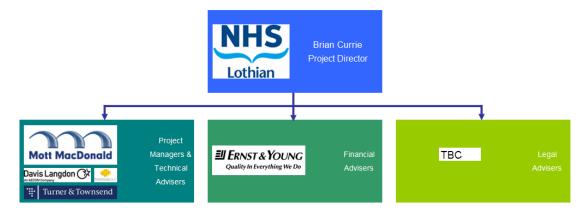


Figure 1: NHSL and Advisers Project Structure

The NHSL Delivery Team will be working alongside the Advisory Teams to delivery the project. The NHSL Team is set up as follows:

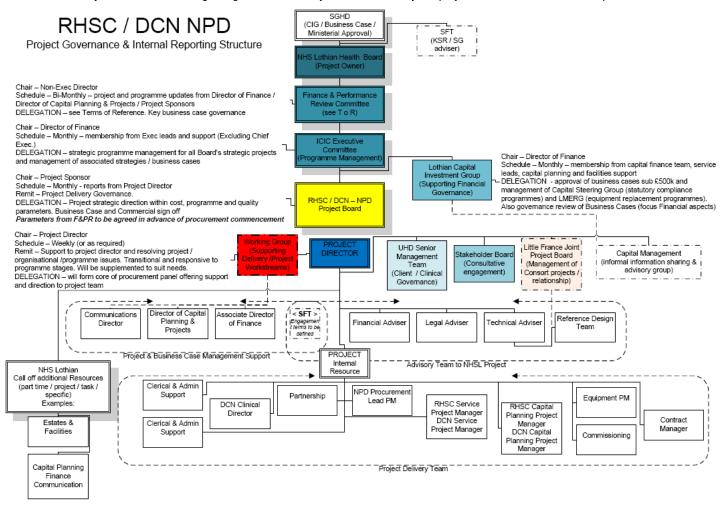


Figure 2: NHSL Delivery Team

## Advisory Services Contracted by NHSL

The form of Contract for the Project Management & Technical Advisory Team during the pre-construction delivery phase is the Standard Model Contract on OGC Buying Solutions Framework Agreement RM457/1, signed 20<sup>th</sup> Oct & 2<sup>nd</sup> Nov 2009 (framework agreement).

The Contract is agreed between the following companies:

- Employer NHS Lothian
- Project Management & Technical Advisory Mott MacDonald Limited

Mott MacDonald Limited has engaged the following companies in sub-consultancy agreements to comprise the Project Management & Technical Advisory Team:

- Project Manager / Reference Design / Facilities Management / Procurement Davis Langdon
- CDM Co-ordinator Turner & Townsend
- Cost Adviser Thomson Gray Partnership
- Health Planner Capita

The design team will comprise the following companies, who will be entering into a sub-consultancy agreement with Davis

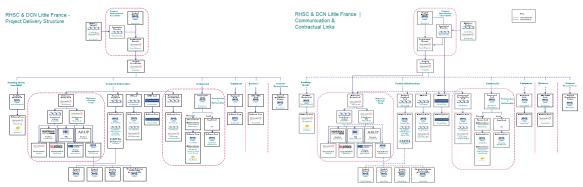
- Boswell Mitchell Johnson Architectural Services
- Nightingale Associates Architectural Services
- Hulley & Kirkwood Building Services Engineering
- Arup Civil & Structural Engineering
- Montagu Evans Planning

#### **Project Organisation Structure** 2.4

The organisational structures will develop and alter as the project progresses. Stage One of the project will include, but is not limited to, the following deliverables: preparation of the reference design, production of NPD procurement document, completion of the Outline Business Case and compilation of the Board's Construction, Facilities Management Specifications, OBC drafting support, contract development and Planning in Principle. The Second stage is competitive procurement of an NPD provider and the third stage is construction delivery. The Organisation Structure is included in Appendix F and Communication and Contractual Links are included in Appendix G.

Below two diagrams are given:

- 1) The Project Delivery Organisational Structure diagram sets out the structure of the project, identifying the key roles, Workstream Leads and organisations involved in the delivery and management of the project in the two separate stages;
- 2) Communication and Contractual Links portray the primary lines of communication as well as contractual links, and the formal communication is expanded upon in section 4.1.



Figures 3: Organisation Structure

Figure 4: Communication and Contractual Links Structure

### 2.5 The Project Team

The Leads for the Project and Work-streams are identified as follows:

Company	Title	Forename	Surname	Notes
NHSL	Project Director, and	Brian	Currie	
	Commercial and			
	Consort Negotiations			
	Liaison Leads			
NHSL	Business Case Lead	Sorrel	Cosens	
NHSL	Equipment Lead	Graham	Gillies	
NHSL	Enabling Works Lead	Andrew	MacDonald	
NHSL	Clinical Lead –	Janice	Mackenzie	
	Paediatric			
NHSL	Clinical Lead – Neuro-	James	Steers	
	sciences			
Mott MacDonald	Commission Director	Richard	Cantlay	
Mott MacDonald	Peer Review	lain	Courtney	
Mott MacDonald	Facilities Management	Paul	Hampson	Procurement Co-ordination is combined
	and Procurement Co-			with Commercial although distinct
	ordination Leads			meetings continue
Mott MacDonald	Commission Manager	Andrew	Scott	
Limited	and Design &			
	Construct Lead			
Mott MacDonald	Design Manager –	David	Stillie	
	Architect Lead			
	(Reference Design)			
Davis Langdon	Peer Review	Kevin	Bradley	
Davis Langdon	Reference Design	Tom	Brady	
	Lead and Design			
	Manager – M&E Lead			
	(Reference Design)			
Davis Langdon	Lead Project Manager	Fraser	McQuarrie	
Thomson Gray	Cost Consultancy Lead	lain	McLean	
Turner & Townsend	CDM Co-ordinator	Graeme	Walker	
	Lead			
Ernst & Young	Commercial –	Michael	Pryor	
	Financial Lead			
TBC	Commercial – Legal	TBC	TBC	Insert when confirmed
	Lead			

The Delivery Team members are as follows:

Company	Title	Forename	Surname	Notes
NHSL	Reference Design,	Neil	McLennan	
NHSL	Clinical Support	Fiona	Halcrow	
NHSL	Cost Management	Kenneth	Ngai	
NHSL	Cost Management and	Carol	Potter	
	Commercial			
NHSL	Commercial	lain	Graham	
NHSL	Equipment	Dougie	Coull	
NHSL - Partnership	Clinical Support	Susan	Lloyd	
Mott MacDonald	Design & Construct	Andy	Duncan	
Mott MacDonald	Design & Construct	Paul	Kelly	
Mott MacDonald	Design & Construct	Andrew	Kelly	

Mott MacDonald	Design & Construct	Willie	Stevenson	
Mott MacDonald	Design & Construct	David	Stillie	
Mott MacDonald	FM	Carol	Thorburn	
Davis Langdon	Document Control	Amy	Kam	
Davis Langdon	Procurement Co- ordination	David	Cunningham	
Davis Langdon	Procurement Co- ordination and Business Case support	Denise	Kelly	
Davis Langdon	Project Co-ordinator	Naomi	Lillie	
Davis Langdon	FM	Simon	McLaughlin	
Davis Langdon	Senior Project Manager	Richard	Park	
Davis Langdon	Enabling Works	Tom	Brady	
Thomson Gray	Enabling Works	lain	McLean	
Thomson Gray	Cost Management	James	Gibson	
Thomson Gray	Cost Management	Ron	Thomson	
Arup	Reference Design - Structural	Jeremy	Grant	
Arup	Reference Design - Structural	Bethan	McEwan	
Boswell Mitchell	Reference Design -	Bob	Hedivan	
Johnson	Support Architects	0	0 - 11	
Boswell Mitchell	Reference Design -	Sonia	Scott	
Johnson	Support Architects M&E	Minhad	OIDamail	
Hulley & Kirkwood		Michael	O'Donnell	
Nightingale Associates	Reference Design - Architect	Jamie	Brewster	
Montagu Evans	Reference Design - Planners	Fraser	Littlejohn	
Montagu Evans	Reference Design - Planners	Andrew	Munnis	
Capita	Health Planners	Craig	Dixon	Capita was formerly known as 'Tribal'
Ernst & Young	Commercial	David	Fraser	
Ernst & Young	Commercial	Lindsay	Crawford	
Ernst & Young	Commercial	Louise	Branch	

#### 2.5.1 Roles & Responsibilities

Detailed Roles and responsibilities for each individual within the core project team are given in Appendix A. Noted below is an overview of each organisation's main functions.

#### 2.5.1.1 Employer – NHS Lothian Health Board

NHSL is responsible for providing health and treatment services for the population of the Edinburgh and the Lothian's. NHSL is the Employer for the Project.

NHSL will be responsible for the preparation of the Reference Design, compilation of their briefing requirements (including design, construction and facilities management), interface management with the existing site operator (Consort) and confirmation of all policy-related issues.

Refer to 'Figure 2: NHSL Organogram' at 2.3.1 for details.

The Clinical Management Teams (CMT) have operational management responsibility for Children's Services and DCN an,d as part of this, are key players in relation to the RHSC + DCN – Little France project. The CMT require to have sign-off of the Reference Design at all stages prior to final approval by NHS Lothian.

#### [NB Role of Partnership to be recorded]

#### 2.5.1.2 Mott MacDonald Limited

Mott MacDonald Limited has been appointed as the lead consultant and will deliver the following services:

- Lead Strategic advice;
- NPD Procurement advice;
- Facilities Management advice;
- Design and Construction advice.

#### 2.5.1.3 Davis Langdon, An AECOM Company

Davis Langdon has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Project Management services;
- Reference Design Management and coordination;
- NPD Procurement support;
- Facilities Management advice.

#### 2.5.1.4 Thomson Gray Partnership

Thomson Gray Partnership has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Cost Advisory services (excluding Facilities Management);
- Whole Life Costing.

#### 2.5.1.5 Turner & Townsend

Turner & Townsend has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Construction Design Management and Health and Safety advice.

The role of CDM Co-ordinator is to provide the client with a key project adviser in respect of construction health and safety risk management matters. The CDMC should: assist and advise the client on appointment of the NPD contractor and the adequacy of management arrangements; ensure proper co-ordination of the health and safety aspects of the design process; facilitate good communication and co-operation between project team members; and co-ordinate health and safety information for issue to the NPD contractor.

#### 2.5.1.6 Financial Advisers - Ernst & Young

The Financial Advisor is engaged to provide financial advice to NHSL in preparing the OBC, including affordability and VFM analysis, and throughout the NPD procurement process, preparing financial elements of bid documentation and financial appraisal of bids.

#### 2.5.1.7 Legal Advisors – To be appointed

#### [NB Expand services to reflect scope on appointments]

Legal advisers for the project are still to be appointed. Interim legal advisory services are being provided by [insert name] through existing arrangements with a full appointment to be sought through completion.

#### 2.5.2 Project Stakeholders

The project is influenced by two branches of stakeholder groups:

- 1) Internal Clinical and management groups -
- Estates & Facilities Management;
- Clinical Task Group. Refer to the table below outlining these groups;
- Partnership;
- SEAT Boards:
- 2) External parties with specific project interest -
- Scottish Futures Trust;
- Scottish Government;
- City of Edinburgh Council;
- Architecture & Design Scotland.

Task Sub	Groups
Co-joined Theatres	RHSC - Medical Inpatients + MDCU
Co-joined Radiology	RHSC - Inpatients - Medical & Surgical Shared
Shared Health Records	RHSC – Neuroscience Inpatients
Joined Neurophysiology	RHSC - Haem/Onc
Clinical Management Suite	RHSC – Classrooms
Main Entrance	RHSC – Critical Care
On – Call	CAMHS
Basement people – Domestic/ Staff changing, Materials Management, Bed Store, Estates	RHSC – Clinical Education & Child, Life & Health
Kitchen	RHSC - Clinical Research Facility
RHSC – A&E/Radiology/PARU Shared	RHSC – Family Support
RHSC – Emergency Care + Adult Link	Spiritual Care & Bereavement
RHSC – PARU	DCN – Acute Care
RHSC – ASAA + Surgical Inpatients	DCN - OPD
RHSC - Therapies + Special Feeds Unit	DCN - PIU & Inpatients
RHSC - OPD - Group 1	DCN - Therapies
RHSC – OPD – Group 2	

#### 2.6 Work-streams

To assist with management of the different elements of the project, the project has been split up into the following work-streams:

- Reference Design Team;
- Design & Construct;
- Facilities Management;
- Construct Design Management Co-ordination;
- Commercial, incorporating Procurement Co-ordination and Commercial Services;
- Equipment;
- Business Case (both Outline and Full);
- Enabling Works;
- Consort Negotiation Liaison;

There is also the Project Management Executive, providing a managerial function across all work-streams, and Clinical support (see below).

The objective of work-streams is to empower individual work-stream leads and their delivery teams to manage themselves in the most appropriate way rather than taking a 'one size fits all' approach to these very different project disciplines.

Work-stream over-views and functions are summarised below.

#### 2.6.1 Project Management Executive (PME)

The PME comprises the Project Director, the Commission Director and Lead Project Manager. This group will meet fortnightly to manage the overall project. Although not a work-stream in itself, the PME will liaise with all the work-streams at a monthly meeting to monitor progress and ensure the project is proceeding appropriately. The PME meeting invitations will extend to Michael Pryor as Finance Lead and the Legal Lead [NB update when confirmed.]

#### 2.6.2 Reference Design

The purpose of the Reference Design work-stream relates to the production and management of the Board's "Reference Design" solution for the RHSC and DCN combined build, which will be released to the market during the competitive dialogue period to demonstrate the Board's anticipated design requirements as a guide for bidding parties. The members of the

Reference Design team are not party to or involved in any commercial project activities or discussions – their activities are managed to ensure their service delivery is "ring-fenced", both across the project in general and using access permissions within BIW, considering that they may join bidding consortia during the procurement process.

Key responsibilities & duties include:

- Preparation of the reference design;
- Production of Room Data Sheets:
- Input of technical data and information for the Equipment Responsibility Matrix;
- Development of engineering solutions;
- Development of robust site development solutions;
- Responsibility for Nightingale associates and BMJ architectural reference design;
- Responsibility for Arup structural design;
- Responsibility for Hulley & Kirkwood M&E design;
- Responsibility for Montagu Evans Planning Consultant.

#### Co-ordination / liaison issues may include:

- Liaison and co-ordination of design team members;
- Liaison with NHSL teams in respect of clinical design requirements:
- Liaison with NHSL teams in respect of facilities management requirements;
- Liaison with third party stakeholders including CEC and A&DS;
- Interface with Design and Construction work-stream to ensure aligned requirements and outputs.

#### 2.6.3 Procurement Co-ordination

The purpose of the Procurement Co-ordination work-stream is to develop and agree the procurement elements of the projects, including the procurement strategy and associated procurement documentation. In addition, the work-stream is to guide the other technical sub-groups in the development of their deliverables in a manner which is consistent with the agreed procurement process. The Procurement Co-ordination work-stream joined with the Commercial work-stream to create a Procurement Deliverables Team, incorporating Financial and Legal Advisers.

The key deliverables and tasks for this work-stream are as follows:

- Development of NPD procurement process;
- Development of procurement documentation;
- Management of procurement process;
- Management of the development of technical elements of the Project Agreement;
- Development of technical elements of the Payment Mechanism.

#### Co-ordination / liaison issues may include:

- Liaison with legal and financial sub-groups for their input into the agreed procurement process and specific procurement issues:
- Liaison with Design and Construction, Facilities Management, Cost Consultancy and Reference Design work-streams to ensure their progress is consistent with the agreed procurement strategy and approach to key procurement issues;
- Liaison with the Project Management Executive to agree the management of the process.

#### 2.6.4 Design and Construction

The purpose of the Design and Construction (D&C) work-stream is to address all technical non-clinical issues in relation to the procurement of the facility. During the NPD process, the work-stream will be responsible for the preparation of the D&C Output Specification or Board's Construction Requirements for inclusion in the ITPD, liaising with other work-streams so that technical requirements are compatible with all other parts of the procurement documentation. The team will also assist in the evaluation of the PQQ responses submitted by potential Bidders. Thereafter input will be provided as required during the Competitive Dialogue (CD) process culminating in evaluation of the technical aspects of the tenders submitted. The team will advise on issues surrounding the appointment of the Preferred Bidder. During the lead up to Financial Close (FC), assistance will be given in the review of the Preferred Bidders proposals. This will include the review of Reviewable Design Data (RDD) which will continue after FC until all RDD has been issued by the successful bidder. Subject to subsequent agreement, the D&C work-stream may also be involved during the construction period to monitor works on site.

#### Key Responsibilities and Duties include:

- Technical advice on all D&C aspects of the project;
- Technical input to the Bidder selection process;
- Development of the Non-Clinical Brief for the Reference Design;
- Validation of the technical feasibility of the Reference Design;
- Development of the D&C Output Specification;
- Technical input to the CD process:
- Evaluation of Bidders' D&C proposals;
- Review of the Preferred Bidder's proposals;
- Review of all RDD;
- Preparation of Information and Communication Technology briefing requirements;
- Assistance on site (if required).

#### Co-ordination / liaison issues may include:

- Liaison with other work-streams to achieve a consistency of approach, particularly in regards to FM;
- Liaison with NHSL Estates so that technical proposals / information for Bidders is consistent with NHSL policies;
- Liaison with Reference Design Team regarding the Brief and to review proposals;
- Liaison with NHSL so that Output Specification is aligned with the enabling works and other issues outwith the site;
- Working in conjunction with NHSL during the evaluation of potential bidders PQQ submissions;
- Working in conjunction with NHSL and the other work-streams during the CD process, including responding to any clarifications required;
- Working with the Preferred Bidder / Project Co to review proposals;
- The D&C work-stream will communicate with NHSL through the NHSL D&C Team Member. The work-stream lead will communicate on a regular basis with the other work-stream leads to co-ordinate and maintain consistency across the project.

#### 2.6.5 Facilities Management

The purpose of the Facilities Management (FM) work stream is to assist and advise the Board in respect of ensuring the reference design takes due cognisance of how FM services can be effectively delivered during the operational phase. During the NPD procurement process and until Financial close, the FM work stream shall work with the design team and the Board to develop FM Service Level Specifications (SLS), Tender Documentations, Payment Mechanism and Interface agreements, which shall ensure the new facility is effectively and efficiently maintained.

#### Key Responsibilities and Duties include:

- Providing advice on design / material selection for Reference Design;
- Development of FM SLS;
- Providing input into PQQ documentation/ evaluation of responses;
- Providing input into tender documentation;
- Providing input into competitive dialogue process:
- Evaluation of FM tender technical and commercial responses;
- Advising on FM costs and benchmarking.

#### Co-ordination / liaison issues may include:

- Liaison with design team members;
- Attendance at design team meetings;
- Liaison with NSHL teams in respect of developing FM SLS and Interface Schedules;
- Liaison with NSHL teams in respect of developing payment mechanisms;
- Management of FM dialogue meetings with bidders during competitive dialogue meetings;
- Issuing and responding to FM clarifications during the tender period;
- Issuing FM Clarifications during the evaluation process.

#### 2.6.6 Construct Design Management Co-ordination

The purpose of the Construct Design Management (CDM) Co-ordination work-stream is to undertake the role of CDM Co-ordinator (CDMC), under the Construction (Design and Management) Regulations, during the development of the reference design and during the NPD procurement process up until the Preferred Bidder is appointed.

#### Key responsibilities & duties include:

- Notification of the project to the Health and Safety Executive;
- Development of pre-construction information during the reference design;
- Review of strategies and residual risk information produced during the reference design;
- Reviewing health and safety requirements of any construction contracts;
- Development of requirements within the ITPD documentation to address the Construction (Design and Management)
   Regulations:
- Evaluation of the NPD organisations' responses during the ITPD and tender e.g. competence requirements and approach to design hazard removal / mitigation;
- Review of strategies and residual risk information produced during the period up to Financial Close.

#### Co-ordination / liaison issues may include:

- Liaison and interface with design team members;
- Attendance at design development meetings;
- Liaison with NHSL teams in respect of Employer duties, obligations and responsibilities in relation to health and safety and statutory obligations.

#### 2.6.7 Commercial Services

The following specialist services and sub-streams will be required to support the project under the banner 'Commercial', along with the Procurement Co-ordination work-stream (see 2.6.3).

#### 2.6.7.1 Cost Consultancy

The purpose of the Cost Consultancy sub-stream is to assist and advise the Board in respect of RHSC/DCN capital value, life-cycle costing and Change Control Processes during the development of the reference design and during the NPD procurement process up until Financial Close.

#### Key responsibilities & duties include:

- Advising in respect of FM costs;
- Cost Consultancy advice in respect of overall 'site wide' affordability issues e.g. clinical and external enabling works;
- Input into business case preparation;
- Input into pre-qualification issues and selection;
- Participation in Competitive Dialogue as appropriate;
- Input into project Financial Closure;
- Advising NHSL Finance on project cash-flow forecasts.

#### Co-ordination / liaison issues may include:

- Continual liaison with design team members;
- Attendance at design development meetings;
- Liaison with NHSL teams in respect of clinical enabling works and procurement of same (also potential liaison with PFI provider);
- Liaison with NHSL teams in respect of external enabling works and procurement of same (also potential liaison with PFI provider):
- Liaison with NHSL Finance regarding cash-flow forecast requirements and reporting.

#### 2.6.7.2 Financial

The Board will be supported by externally-appointed Ernst & Young to provide financial advisory services for the preconstruction and procurement phases of the project. The purpose of the Financial Adviser function is to provide financial advice to NHSL with regards to the pre-procurement and procurement stages of the RHSC + DCN – Little France project.

#### Key responsibilities & duties include:

- Assistance in OBC preparation;
- Focussing on VFM and affordability;
- Pre-qualification;
- Preparation of financial elements of procurement documentation;
- Financial evaluation strategy;
- Evaluation of financial elements of submissions;

- Risk approach /strategy;
- Dialogue and negotiation support;
- Financial elements of approval processes;
- Financial close;
- Post-contract support and support in relation to negotiations with Consort.

#### Co-ordination / liaison issues may include:

- Working with other disciplines to agree overall procurement strategy and evaluation strategy;
- Working within agreed formats and structures for deliverables so they fit within overall project process;
- Agreement of roles in relation to payment mechanism drafting and calibration (which will involve liaison with the technical team preparing the performance framework and the legal team preparing Project Agreement (PA));
- Liaison with legal team on areas of PA requiring financial input;
- Liaison with NHSL finance team on issues of affordability and approval process requirements;
- The procurement project team will need to include the commercial and technical elements of the overall organogram, with NHSL and advisory staff forming the team. Team meetings will be geared to ensure good communication and understanding of respective roles.

#### 2.6.7.3 Legal

The Board will be supported by **[insert name]** who have been appointed externally to provide legal advisory services for the pre-construction and procurement phases of the project. The purpose of the legal advisor function is to assist and advise the Board in respect of their legal obligations and entitlements, procurement advisory services and commercial deal structuring. **Further information to be provided** 

#### 2.6.8 Equipment

A dedicated equipment work-stream has been identified to be responsible for determining the facility-wide equipment requirements. This group will be tasked with confirming the users' ultimate equipment requirements for inclusion within the procurement model. This role will also consider the replacement and transfer strategies in place within the RHSC and DCN facilities in the term leading up to facility hand-over.

The equipment work-stream is formed of NHSL staff with varying duties through the work-stream process. The main team consists of Graham Gillies, work-stream lead, and team members Neil McLennan, Douglas Coull and Mike Conroy providing the support for the process. Neil is providing constant daily support with Douglas and Mike as required.

Other NHSL contacts who are providing professional support and updated costs are as follows:

- Stewart Leitch Anaesthetic Technical Services Manager;
- Steve Kesterton General Medical Physics Equipment Manager, RIE;
- Dave Dewar General Medical Physics Equipment Manager, WGH;
- Caoimhe McIntyre X-Ray;
- Nick Weir MRI & CT;
- Steve Pye Ultrasound.

#### Key responsibilities & duties include:

- Preparation of Equipment Briefing Requirements;
- Development of a detailed Equipment Responsibility Matrix;
- Procurement management of Board-specified equipment.

#### Co-ordination / liaison issues may include:

- Liaison and co-ordination with design team members;
- Liaison with NHSL teams in respect of briefing requirements;
- Co-ordination with procurement work-stream in relation to procurement compliance;
- Interface with Design and Construction work-stream to ensure aligned requirements and outputs.

A draft Equipment Schedule Process is given below for reference:

#### RHSC

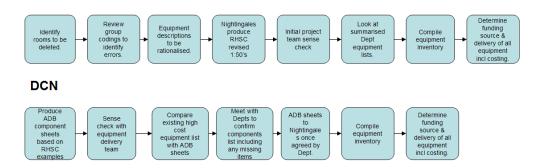


Figure 3: Draft Equipment Schedule Process

#### 2.6.9 Business Case

The purpose of this work-stream is to deliver both the Outline Business Case and Full Business Case in accordance with key mile-stones.

This work-stream comprises the NHSL Finance Project Manager, NHSL Capital Planning Project Manager and EY Financial Adviser, with the NHSL Clinical Project Manager or Service Planning Project Manager and Technical Adviser and NHSL work-stream leads from relevant work-streams as required.

Information required is the output from:

- Reference Design Group and Equipment output turned into the financial case by the Commercial Group;
- Other revenue costs from NHSL Finance;
- Commercial Case from the Procurement Lead:
- Management Case.

#### 2.6.10 Clinical Support

The purpose of this group is to ensure the clinical needs and interests of the project are fully incorporated, encompassing all elements of design, health planning and operation. Its function is to ensure that the key requirement of an efficient, practical, functional facility is achieved throughout both the reference and bidding design phases. The clinical team also represents the interests of the clinical user-groups in the D&C, FM and Equipment work-streams and provides an advisory service to the other elements of the project as necessary.

Key responsibilities & duties include:

- Reviewing and analysing design drawings, providing feedback to the Reference Design Team;
- Leading on the development, production and review of the clinical operational briefs;
- Leading on the development, production and review of the clinical output specifications;
- Reviewing of clinical pathways and flows to ensure SMART (Specific, Measurable, Attainable, Relevant, and Time-bound) working is incorporated;
- Providing support to the RHSC and DCN Clinical Management Team (CMT) on the clinical workforce planning;
- Providing support to the RHSC and DCN Radiology and Theatres CMT on all types of clinical modelling;
- Providing support in associated clinical enabling works in the RIE including A&E and Critical Care.

#### Co-ordination/ liaison issues may include:

- Interface with the FM, Equipment, Design and Construct and Business Case work-streams.
- Interface with CMTs (RHSC & DCN, Radiology, Theatres, Critical Care, Laboratories, CAMHS), Leads and deputies of Clinical Services, and Health Care Planners to set specifications and instruct work (through DL Project Manager);
- Liaison with Design Task Group members as needed, Workforce Planning Task Group and Bed Modelling Task Group.

#### 2.6.11 Work-Steam Co-ordination Arrangements

Work-stream co-ordination is managed through the Project Management Executive team and lines of communication are outlined in the section 2.4 "Project Organisational Structure" and section 4.0 "Project Communications".

The work-stream structure is contained in Appendix D.

## 3. Project Meeting Strategy

#### 3.1 Meeting Structure

The meeting structure covers various project work-streams and functions. These are summarised by the structure below, covering governance and project function:

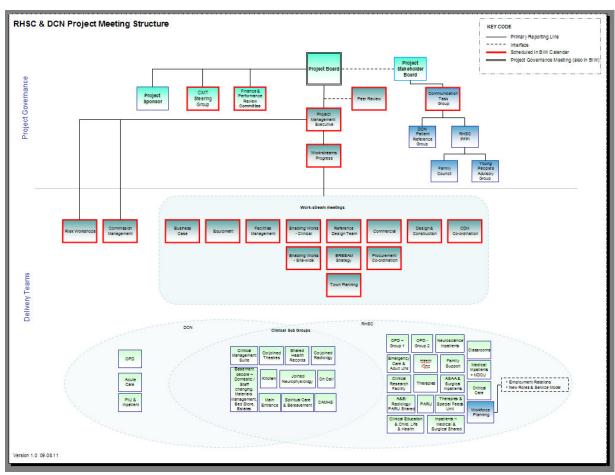


Figure 6: RHSC & DCN Project Meeting Structure

#### 3.2 Meeting Terms of Reference

The meeting terms of reference, including abbreviations and meeting frequency, are illustrated below:

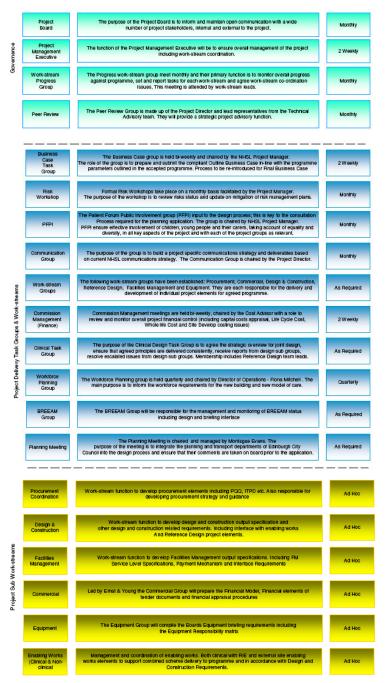


Figure 7: Meeting Terms of Reference

#### 3.3 Meeting Matrix

The Meeting Matrix for the project is available on BIW. The purpose of the matrix is to identify and communicate the roles undertaken at each meeting and the distribution of information associated with the meeting. The matrix records the following by way of a letter coding system:

- The Meeting Chair (C);
- The Meeting Organiser (O);
- The Attendees (A);
- Distribution Group (circulation of all information associated with each meeting) (D).

The Meeting Matrix v2 is contained in Appendix E.

#### 3.4 The Meeting Schedule

The meeting schedule for the project is stored within the BIW Project Calendar.

Why use BIW Project Calendar?

- BIW provides useful functionality that can store a high number of meetings in one shared calendar view. It can therefore provide visibility of all project meetings to its users this ensures that everyone receives the same/consistent information;
- It is a "live" system, thereby providing 'real time' information directly to each user;
- It is a live electronic meeting schedule which avoids continual distribution of document revisions.



Figure 8: Example BIW Calendar

How does it work?

- It is similar to Outlook, involving 'adding a meeting' and completing the basic fields with information;
- Any user can input their team meetings or other ad hoc meetings;
- Meetings that individuals are required to attend are highlighted by a colour key.

#### What about Outlook?

- BIW Project Calendar will be used in parallel with Outlook. One does not replace the other for various reasons, but primarily because not everyone involved in the project is a BIW user;
- Outlook will continue to be the primary management tool for scheduling meetings in diaries. BIW Project Calendar is being used as a meeting communication tool for everyone involved in the Project;
- Note: Each meeting organiser will have their own approach to managing the entry of meetings into the attendee's diaries in Outlook or other (e.g. email with information, a meeting invite, verbal etc).

#### What meetings are included within the Project Calendar?

- The core, regular meetings are to be scheduled in the BIW Project Calendar;
- Any other ad hoc meetings should also be noted within the Project Calendar by the meeting organiser.

#### Who are responsible for the Project Calendar?

- The Project Co-ordinator (Naomi Lillie, DL) will take responsibility for maintaining the information within the BIW Project Calendar for regular project meetings and *ad hoc* meetings that are identified as relevant project-wide;
- All organisers of meetings are to add the Project Co-ordinator as an 'optional' attendee to ensure up-to-date information is communicated through Outlook Invitations, and include where updates are distributed by e-mail (NB the Project Co-ordinator will not attend these meetings, this is just for information purposes):
- Clinical Design Sub-Group Meetings are to be updated by Zuzana Stofankova, of the NHSL Project Team, who is responsible for all scheduling of the Clinical Design Sub Group level meetings;
- Each of the work-stream leads is responsible for inputting any ad hoc meetings specific to his / her own work-stream;
- Individuals are responsible for inputting and maintaining meeting information they choose to upload to the calendar.

#### 3.5 Meeting Protocols

All meeting invitations should be formally issued via Outlook (or other diary system) where possible. This ensures that all attendees are updated with diary information simultaneously and avoids unnecessary duplication of effort.

Work-stream leads are responsible for chairing, recording and general co-ordination of work-stream meetings.

The agenda and minutes or action notes of the meeting are to be prepared and issued by the party responsible for chairing the meeting or a designated note taker.

Distribution of the meeting outputs for each meeting shall be recorded on the minutes or meeting note.

Agendas and meeting papers should be circulated at least 3 working days prior to the meeting.

The minutes should be issued to the distribution list within 96 hours of the meeting.

All parties attending meetings are responsible for noting their individual actions and progressing actions arising and should not rely upon the issue of minutes for progressing project matters.

All parties attending meetings are responsible for printing their own copy of meeting papers.

Each consultant will retain responsibility for convening meetings with appropriate third-parties to permit design development as the project proceeds, and to produce and circulate a formal minute or summary note of this meeting.

Individuals are responsible for sending their formal apologies for non-attendance at a meeting. This should be done as far as possible in advance of the meeting. Notice should be given to the Meeting Chair and / or Meeting Organiser.

## 4. Project Communication

#### 4.1 Lines of Communication

The general lines of communication for the project are illustrated on Figure 1.0 – Project Organisational & Communication Structure in section 3 of this document.

Formally, the lines of communication for the project shall be as follows:

- Communication lines both formally and informally are to be in accordance with the Project Organogram in Section 2.4 of this PEP. All contractual lines are shown by the solid lines and all communication routes are shown by dashed lines;
- All formal communication between the Board and the technical advisors which constitutes any variation or amendment to the main contract will be formalised between the Board Project Director and the Commission Manager from Mott MacDonald. The Board's representatives within each of the work-streams will be responsible for requesting proposed changes to the Project Director and these will be formalised in accordance with the change control *pro forma* contained in Appendix C. Each of the work-stream leads will be responsible for notifying the Project Management Executive team of the changes requested;
- All work-stream leads will provide regular updates to the Project Manager (Davis Langdon). A formal progress report will be prepared by the work-stream leads on a monthly basis and issued one week prior to the monthly meeting;
- The Lead Project Manager will be responsible for the overall co-ordination and management of the work-streams. This will be managed via a monthly work-stream co-ordination meeting which will be chaired by the Lead Project Manager and attended by the work-stream leads, Commission Director and Project Director;
- The Lead Project Manager will be the first point of contact for the Project Director on all day-to-day issues. The lead Project Manager will meet regularly and keep the Commissioning Manager fully briefed to ensure he is fully aware of all project matters:
- In general terms the work-streams will communicate and function internally to their groups. Where cross work-stream communication and interface is necessary this will be facilitated via the leads of the work-streams. If required, co-ordination meetings will be arranged to address matters. Matters arising from the work-streams which need to be addressed by third parties or other NHSL consultees will be co-ordinated by the NHSL representative of that work-stream;
- The Lead Project Manager will be included in circulation lists for all project related correspondence where relevant. In order to ensure effective communication with parties involved, or affected by the Works associated with the project, a joint communications protocol will be developed for engaging and managing stakeholders;
- The Project Director will communicate with the Commission Director on all contractual matters and raise any concerns in relation to project matters;
- The NHSL Project Team will communicate with the design team members via DL for all formal matters in particular when instructing a change in brief;
- DL will require all formal changes to be instructed by the Commission Manager.

All communications are to be as clear and concise as possible and all parties are encouraged to verbally discuss issues. The use of e-mail correspondence / communication is to be encouraged; however, any documents relating to specific contract issues / mechanisms or legal documents, financial certificates, or where signed and witnessed signatories are required, hard-copies must be provided.

#### 4.2 Project Contact Directory

A Project Contact Directory will be made available on BIW and is designed to be accessible to all parties to find the relevant persons to contact where necessary. The document is maintained by DL. Any updates required to the directory should be directed to Naomi Lillie.

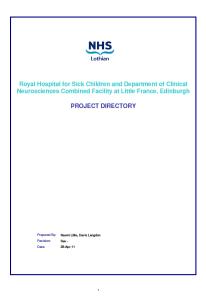


Figure 9: Project Contact Directory Example Pages

#### 4.3 BIW Project Collaboration Tool & Document Control

- 4.3.1 The project utilises BIW as a channel for communication and storage of project documents and for all contract administration. BIW is the management tool for the following procedures/protocols:
- Design Management and storage;
- Risk Register;
- Data Room;
- Collation of Board policies and reference documents;
- Procurement and Contract documents.

It is planned that following Stage 1 (reference design and procurement set-up phases) BIW will be used for live data a tendering facility for bidding consortia in the Competitive Dialogue process.

#### 4.3.2 BIW Administration Roles & Responsibilities:

Each project has users carrying out the following admin roles:

- Project Information Coordinator (PIC) The PICs are responsible for requesting new companies and adding new users to the project and amending user rights accordingly. Any changes to the configuration of BIW must be authorised by a PIC. On this Project the PICs are Naomi Lillie and Amy Kam of DL;
- Company Administrator (CA) At least one user per company should be nominated to be the CA for that company. This person can create new users for their company and edit existing user details and the rights of their company users. This is normally the user who attends the initial BIW training. This user will also be able to train other users within their own companies in the basic areas of the system. Company Administrators are as per the table below:

COMPANY	ADMINISTRATORS
NHS Lothian	Zuzana Stofankova (Christine McGeechan TBC)
Davis Langdon	Amy Kam
Mott MacDonald	David Stillie
Nightingale Associates	Sarah Menzies
BMJ	Cameron Smith
Arup	Jessica Lyall (Arup)
Hulley & Kirkwood	Brain Feeley

#### 4.3.3 BIW Technical Assistance

System Administration & Helpdesk can provide information and assistance in regards to queries about the channel. Email: <a href="helpline@biwtech.com">helpline@biwtech.com</a> or Tel: +44 (0) 845 1300 999.

The Project BIW Consultant is Richard Moyle (Email) -

System Help Guides – Help guides are available throughout the various screens in the channel. Clicking on screen will take you to the relevant help guides for that particular section.

#### 4.3.4 Use of BIW

The use of BIW is considered imperative for such means and all required parties are to obtain log-in details and publish documentation / drawings under the appropriate folders and as per the guidance outlined in the BIW Project Collaboration Tool Protocols Document available within BIW. It is expected that BIW should be utilised on a daily basic by the key members of the project team.

#### 4.4 Change Control Procedure

NHSL, Mott MacDonald Limited and their sub-consultants will follow the change control procedures in accordance with the Head Contract Agreement. In addition all parties will adopt the following protocols:

Each sub-consultant will submit change requests to Mott MacDonald Limited if additional services or variations to their agreed scope of service are introduced. The following process should be followed dependent on the nature of the change:

#### Variation instructions notified by the sub-consultant to Mott MacDonald Limited:

- Step 1 The sub-consultant will raise a Change Control Form, outlining anticipated financial change, programme implications and consequences of the change
- Step 2 Mott MacDonald Limited will consider the implications of this change and submit a Change Control Order to NHSL for approval using the Change Control document contained in appendix C
- Step 3 Mott MacDonald Limited will return to the sub-consultant a signed off copy of their Change Control Form.

#### Variation instructions notified by Mott MacDonald Limited to the sub-consultant:

- Step 1 Mott MacDonald Limited will notify each sub-consultant when they require a change to the agreed scope of service and will instruct the sub-consultant to complete a Change Control Form. Mott MacDonald will provide sufficient briefing information within their request in order that the sub-consultant can confirm anticipated financial change, programme implications and record any associated consequences.
- Step 2 Mott MacDonald Limited will consider the implications of this change and submit a Change Control Order to NHSL for approval using the Change Control document contained in appendix C
- Step 3 Mott MacDonald Limited will return to the sub-consultant a signed off copy of their Change Control Request.

Mott MacDonald Limited will return comments on the proposed change order within five working days. Mott MacDonald will notify the sub-consultant to proceed and implement the change or reject the change within ten working days of transmittal. If no response is given within the ten working day period then the request for change will be deemed as approved. Change control requests will be submitted to Mott MacDonald from each sub-consultant via email. Each sub-consultant will retain a schedule of approved change orders.

All variation orders submitted by sub-consultants will be accompanied by a resource schedule. In the event that Mott MacDonald Limited instruct works to commence without cost and programme effects being agreed all costs reasonably incurred in relation to the variation will be recovered.

The Board's representatives within each of the work-streams will be responsible for notifying the Project Director of proposed changes. Each of the work-stream leads will be responsible for notifying the Executive Project Management team of the changes requested.

#### 4.5 Stakeholders

There are many stakeholders involved in a project of this nature and these are to be identified under four main headings for ease of reference, as follows:

- NHS Lothian, comprising Lothian Partnership Forum, Executive Management Team, RHSC Re-Provision Clinical design Groups, Facilities Management;
- Statutory Authorities and Public Utilities including the Health & Safety Executive. This also includes government agencies such as Scottish Futures Trust (SFT) and other bodies such a Architecture and Design Scotland (A&DS) who are a statutory consultee through the planning process;
- Funding comprising Lothian NHS Board and the Scottish Government, PFPI (Child 7 family Advisory Board), patients, service users and charities;
- Other Stakeholders comprising National Education Services Scotland (NES), other Heath Boards, core NHS Lothian sections & others.

It is important to establish for each stakeholder, the role they have, their influencing factor, the impact they will have and how each communicates and engages with the project as a whole. This information is currently under development.

The Stakeholder Map will be stored within BIW.

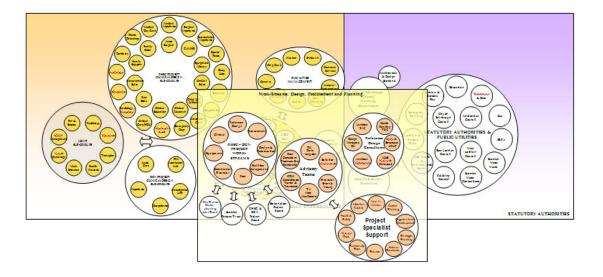


Figure 10: Example Stakeholder Map Diagrams

## 5. Programme, Progress & Reporting

#### 5.1 Key Mile-stones

The key milestones of the project are detailed as follows:

Milestone:	Date:				
Reference Design Brief	17/06/2011				
Concept Design 1:500 & Approvals	09/09/2011				
Scheme Design 1:200 & Approvals	03/02/2012				
SGHD Approval of OBC	15/11/2011				
SGHD Approval of FBC	10/07/2013				
Planning in Principle Granted	09/11/2011				
Detailed Planning Granted	19/08/2013				
Car Park B Transfer Deadline	14/09/2011				
Project Information Notice	18/10/2011				
Bidders' Day	02/12/2011				
Release OJEU Notice	15/11/2011				
PQQ Period	31/01/2012				
Select Short-list Bidders	27/03/2012				
CD – Open Dialogue	06/04/2012				
CD – Interim Process	27/11/2012				
CD – Final Tenders	21/01/2013				
CD – Evaluation	22/04/2013				
Appoint Preferred Bidder	22/04/2013				
Commercial Close	22/07/2013				
Financial Close	23/07/2013				
Construction Start	18/11/2013				
Construction Work Complete	22/07/2016				
Hospital Going Live	05/09/2016				

DL will provide and update the programme for all Progress meetings tracking project development and identifying potential matters arising which may affect the identified milestones recorded above. In the event that changes to the programme are necessary these will be considered as part of the work-stream Progress Meeting and approved for implementation by the NHSL Board.

#### 5.2 Progress Monitoring and Reporting

The diagram below illustrates the Progress Reporting Structure for the project. A work-stream lead has been identified within each of the service lines and will provide a summary of progress made for inclusion in the monthly Progress Report. This should to be provided to the Project Manager 5 working days in advance of the meeting.

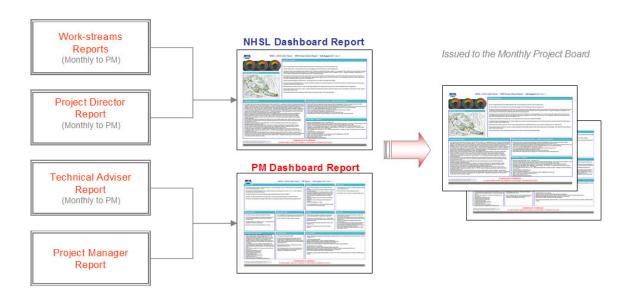


Figure 11: Project Reporting Structure

#### 5.2.1 Project Management & Technical Advisory Report | Davis Langdon

DL will provide a monthly Project Manager's Report for issue to the Project Commissioner. The purpose of the Project Manager's Report is to fully inform the Project Director on the progress of the project, in relation to programme, design, cost, procurement and construction; in particular to highlight any areas of concern and critical activities to be undertaken by the Client Team, Project Board or other members of the project team. The Project Managers Report is a dashboard style report which forms part of the Monthly Steering Group Dashboard Report.

An example of the full NHSL Steering Group Dashboard Report is shown at Appendix B.

The progress report will contain:

- Summary of the overall progress made within the reporting period;
- Updated on the progress made by each work stream;
- Programme Summary and update;
- Identification of key issues;
- Summary of key risks and any changes in the risk profile.

#### 5.2.2 Progress Reporting Schedule

The progress reporting schedule for the remainder of 2011 is shown below:





Progress Reporting - schedule of dates to end of 2011

Report to be prepared by	Issue to Davis Langdon	Report type	Frequency	Date of meeting	Report by	Input to
		Work-stream Progress Report	monthly	03-Oct-11	26-Sep-11	Work-stream Progress Meeting
Project Board Report CM, PM, TA and CDM	To: Fraser McQuarrie cc: Richard Park & Naomi Lillie	Summary Report	monthly	14-Oct-11	07-Oct-11	Project Board Meeting
		Work-stream Progress Report	monthly	31-Oct-11	24-Oct-11	Work-stream Progress Meeting
Project Board Report CM, PM, TA and CDM	To: Fraser McQuarrie cc: Richard Park & Naomi Lillie	Summary Report	monthly	11-Nov-11	04-Nov-11	Project Board Meeting
		Work-stream Progress Report	monthly	28-Nov-11	21-Nov-11	Work-stream Progress Meeting
Project Board Report CM, PM, TA and CDM	To: Fraser McQuarrie cc: Richard Park & Naomi Lillie	Summary Report	monthly	09-Dec-11	02-Dec-11	Project Board Meeting

Figure 12: Progress Reporting Schedule for 2011

#### 5.2.3 Reports & Documents

All documents prepared by the Project Management and Technical Advisory teams will be released containing the Mott MacDonald Limited and Davis Langdon, An AECOM Company logos. The document originator will use the agreed templates for all minutes, reports and letters. Changes to documents will be covered on the "Document Issue".

All documents should contain the following disclaimer statement:

"Commercial In Confidence - not disclosable under the Freedom of Information (Scotland) Act 2002"

#### 5.3 Action Tracking

DL has introduced a centralised Action Log for the project. The purpose of the Action Log is to ensure that all key actions are managed and tracked through to completion. It adopts a proactive approach to the management of activities, and provides a useful *aide memoir* to the project teams. The Action Log will be updated and circulated 3 days in advance of the Progress workstream meetings. The key elements are as follows:

- Any person can raise an action to be added to the log for tracking purposes;
- DL is responsible for maintaining the information within the log and communicating updates and additions to the log on a regular basis (minimum fortnightly basis);
- DL will report to the client team at weekly team meetings on the progress of actions, ensuring that any overdue actions are highlighted, and escalated if appropriate.

An example of the Project Action Log is shown below at Figure 10.0. Revisions of the Action Log are also available within BIW, filename "Project Action Schedule".

#### **RHSC & DCN Little France**

# Action Schedule KEY DESCRIPTION Action required Action required in next 4 days Date 19 August 2011 Outstanding - immediate action required

No	Action Description	Date Matter Raised	Work-Stream	Action Owner	Date By	Status	Actions Taken
14	MP requires costings from IMcL in early August as it takes 2-3 weeks	31-May-11	Commercial	IMcL	05-Jun-11	Open	
15	MP to check how value-for-money will be evaluated	31-May-11	Commercial	MP	20-Jun-11	Open	Update 19.07.11 (BC, verbal): Awaiting SFT guidance.
20	BC to arrange NHSL document of roles and responsibilities and forward to NL	31-May-11	Commercial	BC	27-Jun-11	Open	
23	Briefs and Operational Policies are to be delivered on the 6th June	31-May-11	Reference Design	NMcL	06-Jun-11	Open	
24	Helipad and Kitchen specialist consultants may be required, AS to discuss with JB and TB and consider appointing through Nightingale Associates	31-May-11	Reference Design	AS	02-Jun-11	Open	Update 22.07.1 (NL): Helipad appointment covered by actions 210 & 245, kitchen appointment ongoing.
25	JB requested legal boundary clarification – BC to provide AS with information /instruction for an engineer.	31-May-11	Reference Design	DSti	03-Jun-11	Open	Update 15.07.11 (NL): Amended from BC action to DS to liaise with AS.
26	BC to update TB and JB with Reference Design requirements and Consort negotiations at Thursday's meeting	31-May-11	Reference Design	ТВ	02-Jun-11	Open	Update 15.07.11 (NL): Amended from BC action to TB.
27	BC to send Transport information to FMcQ to pass on to TB	31-May-11	Reference Design	FMcQ	02-Jun-11	Open	Update 15.07.11 (NL): Amended from BC action to FMcQ.
29	RC to request detailed methodology from lain McLean to clarify cost workings – some detail has already been provided, but more explanation is required.		N/A	RC	10-Jun-11	Open	Update 08.08.11 (RC): This is to be reviewed with TC2. Action ongoing.
30	BC requested guidance of funding options from Mott MacDonald. AS to liaise with Graham Gillies.	06-Jun-11	N/A	AS	20-Jun-11	Open	
31	BC and Carol Potter to meet with the finance team at the Health Board, where the scope will be established. BC to issue scope when confirmed.	06-Jun-11	Commercial	BC	20-Jun-11	Open	

Figure 13: Example Project Action Log

## 6. Risk Management

#### 6.1 Risk Management Approach

Risks will be identified through a combination of risk workshops, work-stream development activities, design and scoping production, policy requirements and through management activities. The risks identified are to be managed in pro-active manner in accordance with the mitigation strategy agreed for each risk identified. The risk register remains a live document which must be regularly reviewed and updated by all parties. Risk will be categorised and quantitively scored in accordance with the probability and impact scoring matrix. Following identification and risk assessment each risk will be ranked to understand the key risks within the project, in order that these can be priority managed. Mitigation strategies will be developed for each of the key risks and will be assigned to individual work-stream leads for action. Risks will be reviewed and reported to DL on a monthly basis for inclusion within the updated register.

The outputs of the risk management process will also be considered by the commercial work-stream. Ernst & Young will be responsible for monitoring financial risk, and DL will be monitoring project risks and facilitate monthly risk management workshops.

Any new risk to the project should be raised via the appropriate notification system and assessed during future workshops.

#### 6.2 Risk Register

The Risk Register will be stored within BIW for reference by all parties.

Rist	k Identificatio	•	Pre Mitigation Assessment												C	ategorie	5	Risk Management				
														e.	antifiabl			Un-Quantifiab				
8													Mas MPI	D Rirkr		MPD Rick						
Risk Des	and the second second	Risk Types (refer to SCIM guidance)	Probabil ity (1-5)	Impact Cost (1-5)	Impact Program me (1-5)	Risk Score Cost	Impact Cost £	Risk Score Programm	Impact Programm ¢ £	Total Risk Value (Program me + Cost)	Average Risk Score (Cost & Programm e)	Risk Index	Clinical, Soft FM & 4 Isnagement	Σ.,	HE Project	SFT Project	MPD Project	Management 4 Clinical	Management Actions Planned	Risk Owner	Action Owner	Re
TRANSPORTATION Inadequate transpor support patients, sta to redesigned servic relation to specific Young Peoplesservi	art arrangomonts to raff & visitar accoss cos. In particular in noods of Childron & ricos	typer	2	2	1	4	649,587.58	2	ω,575.55	622,269.85	3	ą.	•						Transpartation.rtratogy developed in accordance with rite urage and patient fruirbor modellingstudies. Strategy developed in conjunction with Extetar and CEC	RDT		
CONSULTANT LIQUI A mombor of the Cor into Liquidation	JIDATION anzultant Toam gaor	Procurement f Funding types	3	1	5	3		15			,			•	•				Financial tert to determine financial stability. On quin quanitaring and checks.	CP		
PLANNING PERMIS: Failure to obtain plan on programme (inab Statutory Consulted	anningpormizzian bilitytazatizfyall	Dorign f Construction types	2	1	5	2	613,125.88	10		6133,317.31	6	Ì		•	•				PiPrubmizzionrubmitted an pragramme. Engagement uith CEC uill ourure response uithin anticipated timeframe. CEC governed by maximum response period	BC		
HIGHWAYS WORKS Provinurly unidentif alterations are requi (Maintenance of all arrangements toffre site).	ified highway uired. Loxirting accorr	Dorign f Construction types	3	ä	Z	12	6135,875,88	7)		6214,387.85	, J /			M					Engagement with Highways authority and their advirors during design and planning process has identified extent of contribution works to be conditioned.	RDT		
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LIAISON WITH CONS Difficulties in carare Cansart an time and	rdinating works with	Dorign f Construction types	5	2	4	10	6135,875.88	20		6557,451.52	15			•					Consert userlar and an and Contract variations to be attractured to ensure explicit delivery obligations including quality and programme. Budget risk servemed by Consert on variation agreement.	GC		
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DESIGN CHANGES T CONSTRUCTION Rirk of dolay on achi on the brief andfore	hioving agroomont	Dorign f Construction types	3		Ţ,	12	,	3	,157.13	22,76.13	7.5	Ť							Dotallattakohalder engegement plan during reference derign pracezz. Campliance with defined change cantral pracezz	BC		Ī

Figure 14: Example Risk Register

## 7. Design Management & Sign-Off Process

#### 7.1 Design Sign-Off Protocol

A full Design Sign-off protocol has been developed by DL and agreed with all parties.

The design sign-off milestones are included within the Stage 1 Procurement and Exemplar Design work-stream Programme.

#### 7.2 Design Monitoring / Design Issue Log

A design monitoring system will be implemented through the design development period which ensures all documents, drawings, schedule etc issued by the design team are properly checked and signed off by the NHSL Project Team on behalf of the clinical task groups. This will ensure that changes are tracked and provide a clear audit trail.

DL has introduced a master Design Issue Log to capture all design issues throughout the Exemplar Design process. The log is a live document and will be maintained by the Design Manager throughout the design process and released to the Project Manager on a weekly basis. Information, notes, comments and proposed changes will be recorded by the Design Manager at design team meetings and reported to the Project Management Executive. The PME will be responsible for accepting changes arising from these meetings. Special ad-hoc meetings may also be called to review and instruct proposed changes if required in timescales out with the bi-weekly PME meeting cycle. Revisions of the log will be published in BIW on a regular basis.

#### 7.3 Client Instruction & Decision Log

DL has introduced a Client Instruction & Decision Log to ensure that any instruction or decision received from any member of the client team is verified by the Project Director prior to a formal instruction being raised via the contract. The log is maintained and issued by DL to the Project Director for approval on a regular basis. An example of the Client Instruction Log is to be included when underway. An example of the Client Instruction Log is shown below:

Davis Langdon ()

Royal Hospital for Sick Children and Department of Clinical Neurosciences

Project Log | Mott MacDonald Instruction Log

CCF Ref	Instructio a Owner	Action / Instruction B Require	Instructio n Raised By	Date of Request ▼	Require d By Dat	CCF Title ▼	Descriptioa	CCF Raised	Date of MML Instructi	Instruction Approved! Rejected	Financial Change	Programme Change	Comments
001	Davir Langdon	Scope Variant	ARUP	30-Jun-11	14-Jul-11	Bird Survey	Bird Survey in relation to future EIA required as part of the Planning in Principle process (CEC)	Yer	09-Aug-11	Approved	1,095.00	Nil	CCO Reference Matt MecDanald 003
002	Davir Langdon	Scope Variant	BMJ/NA	06-Jul-11	20-Jul-11	Landreapo Dorign	Landrcape and Virual Impact Azzezment in relation to future EIA required arpart of the Planning in Principle process (CEC)	Yes	09-Aug-11	Approved	12,240.00	Nil	CCO Reference Matt MecDanald 005
003	Davir Langdon	Scope Variant	BMJ/NA	06-Jul-11	20-Jul-11	Catoring Conzultancy	Provision of specialist catering consultancy services	Yes	10-Aug-11	Approved	TBC		Cartr ta be agreed
004	Davir Langdon	Scape Variant	Mantaqu Evans	06-Jul-11	20-Jul-11	PlanningFoo	Ro-imburrostatutary Planning Foo	Yes	09-Aug-11	Approved	8,075.00	Nil	
005	Davir Langdon	Scape Variant	Davir Langdon	06-Jul-11	20-Jul-11	Buriners Care Support	Pravide drafting input for the Outline Buriness Case on the risk, contractual and project management arrangements	Yes					Outstanding, MM to raise
006	Davir Langdon	Scope Variant	Davir Langdon	12-Jul-11	26-Jul-11	Reference Dezign	Provide Reference Design to Stage C. Architecture, CRS and MRE (including design management function)	Yer	09-Aug-11	Approved	1,404,000.00	Nil	000 Reference Matt MacDanald 883 Approved instruction excludes Design
007	Davir Langdon	Scope Variant	Davir Langdon	28-Jul-11	*11-Aug-11	Reference Dezign	1:500 derign changer to reflect revised client brief in accordance with updated Schedule of Accommodation reference: Abid Build Accommodation Summary 27 Ably Version 2	Yer	09-Aug-11	Approved		Nil	CCO Reference Matt MacDanald 886
008	Mett MecDeneld	Instruction	Brian Currio	11-Aug-11		Daries Acceleration - Convert	Accelerate during the add stilled for the proof files from for General's to chained a deligent to provide the foreign strength of the files from the files f	Ver	17-Aug-11	Approved	TBC	Mil	Carry to be agreed
	Mett MecDeneld	Instruction	Brian Currie	06-Jul-11		Trunk Source	Determine impact (if any) an existing truck rewers af current reference design. It is aur desire ta avaid any relacation.	N.					Cartz to be agreed
	Mett MecDeneld	Client Instruction	Brian Currie	06-Jul-11	20-Jul-11	ARE Dazign - Convert	Design to recognize that part of now A+E and Theatre Corridor above could be built by zamenne (Conzert) when then NPD Co. Design should incorporate an obvious break point architecturally and angineering architectural persons annual recognization of the property of the improvement of the control of the persons and the persons annual recognization of the persons and the persons are persons and the persons are persons and the persons and the persons are persons are persons and the persons are persons are persons are persons and the persons are persons are persons and the persons are persons are persons and the persons are persons are persons are persons	No.					Cartr to be agreed
	Matt MecDaneld	Client Instruction	Brian Currie	06-Jul-11	20-Jul-11	Enhanced Kitchen Facility	on bancoment of current kitchen facility – NHSL to provide briefing info on this early next	No					Cartr ta be agreed
	Mett MecDeneld	Olient Instruction	Brian Currie	06-Jul-11	20-Jul-11	Marketing Brachure	Propore a "marketing" brachure with aptional pager to be wedfor a variety of purpose (internal * external communications).	No					Cartr tabe agreed

Figure 15: Example Client Instruction Log

## 8. Budget & Cost Management

#### 8.1 Cost Reporting and Control

Cost reporting will be undertaken through a comprehensive Financial Report issued by the Cost Advisers. This report will be issued monthly. A schedule of these dates is to be agreed between the Project Team and circulated by the Cost Advisers.

The content of such cost reporting is to include the following:

- Site Wide development cost update;
- Construction cost analysis;
- Reconciliation with client budget;
- Cash flow statements;
- Potential cost changes identified by the risk process.

## 9. Health & Safety

#### 9.1 Construction (Design and Management) Regulations

During the period up until financial close the CDM client for the project will be NHS Lothian. After financial close the successful NPD organisation will be elected as CDM client and will be responsible undertaking client duties for the construction period which include the appointment of the CDM Co-ordinator and Principal Contractor. The implementation of the CDM Regulations during the Reference Design and NPD procurement stage will comprise:

- The identification and provision of information that relates to health and safety by the designers. This will include identifying key issues within the reference design and also interface issues with the existing RIE and advanced works contracts undertaken by others.
- The development of requirements within the ITPD documentation that will enable the NPD tendering organisations to demonstrate that they have the necessary competence and understanding to undertake the CDM duty holder responsibilities after the NPD organisation has been elected as CDM client.

This will be followed by a review of the submissions as part of the evaluation process:

- The design that is being developed by the NPD tendering organisations is addressing the requirements of the CDM Regulations with regard to designer duties e.g. there is a process for design risk management in place and it is being implemented.
- Reviewing the design that is prepared between the appointment of the NPD organisation as preferred bidder and financial close for health and safety issues.
- There is a "data room" (which will be on BIW) in which all relevant health & safety information will be located this will comprise the pre-construction information that will be transferred over to the NPD organisation.
- Addressing health and safety requirements in any survey or investigation works that are required as part of the project to inform the reference design or the NPD tendering organisations. This will include liaison with Consort and other third parties as appropriate to comply with their site rules and requirements for method statements.

#### 10. Governance & Audit

#### 10.1 OGC Gateway Reviews

The project will go through Key Stage Reviews (KSR) at certain pre-defined points during the procurement process (based on the competitive dialogue process). These reviews will be implemented at the following stages:

- In advance of OJEU Notice being released
- Pre release of Invitation to submit Final Tenders
- Pre NPD Co Appointment as Preferred Bidder
- Pre Financial Close

The reviews are based initially on self-assessment through the completion by the project team of the KSR questionnaires, this is based on Scottish Government standard questionnaire.

It is still to be determined if the project will undertake a voluntary KSR at the pre- ITPD (Invitation to Participate in Dialogue) stage.

Summary of KSR:

#### Advance of OJEU Notice:

This review should not be regarded as a pass/fail exercise. It is a tool to assist NHS Bodies to pause, and consider whether they are advanced sufficiently in their project development, considered rigorously project deliverability in order to proceed to issue of a project OJEU Notice to launch their procurement.

Section 1 - Governance

Section 2 - Scope

Section 3 - Stakeholders

Section 4 - Competition

Section 5 - Procurement Risks

Section 6 - Value for Money

#### Pre Invitation to submit Final Tenders

At this stage the Board will provide information outlining the proposed approach and methodology, including how they will approach the Competitive Dialogue phase.

Section 1 - Update & Affordability

Section 2 - Value for Money

Section 3 - Commercial Issues

Section 4 - Deliverability

Section 5 - Data Room and Background Information

#### Pre Preferred Bidder Appointment

This review is required to check all actions have been taken to secure commitment from the prospective Preferred Bidder, its key contractors and its funders. Clarify the parameters of the commercial negotiations and any outstanding commercial terms. Provide transparency in terms of affordability testing. Establish status of risk profile in order to prevent reallocation of risk or adverse changes to the project risk profile.

Section 1 - Project Update

Section 2 - Affordability / Value for Money

Section 3 - Financial / Risk

Section 4 - Commercial Position

Section 5 - Technical

Section 6 - Deliverability

#### Pre Financial Close

The intention of the Pre-Financial Close Key Stage Review will be to assist the Board in considering what needs to be put in place in terms of staffing and resources ahead of the construction and operational stages of the project.

The above is guidance is an overview of Scottish Government Health Directorate guidance.

#### -

#### 10.2 AEDET Review

The Achieving Excellence Design Evaluation Toolkit (AEDET Evolution) assists the NHS, Trusts and other health authorities in determining and managing their design requirements from initial proposals through to post project evaluation. The toolkit is questionnaire based covering Functionality, Impact and Build Quality. These three headings are further divided into ten assessment criteria.

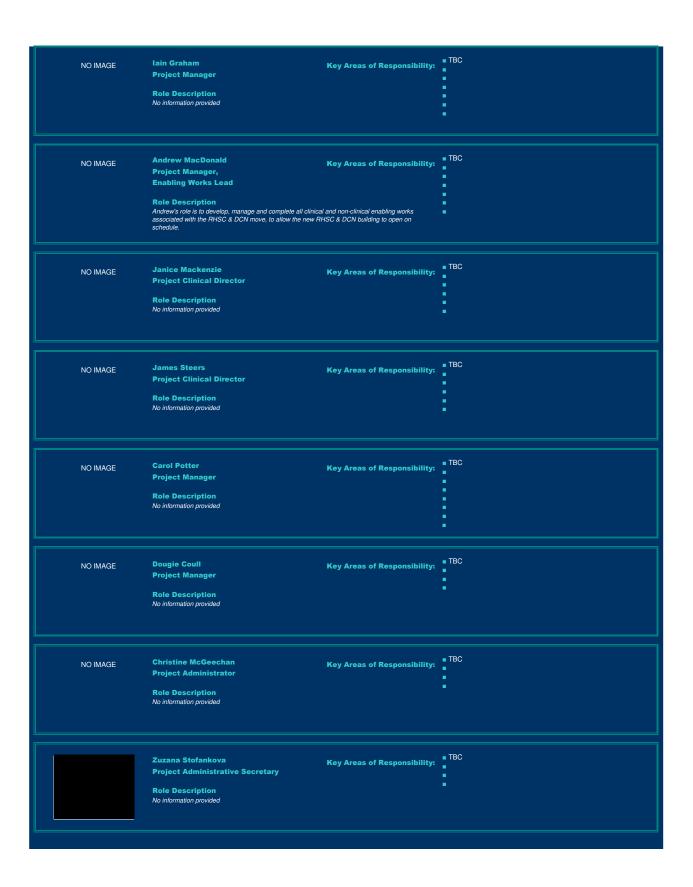
This design evaluation toolkit will be used to define NHS Lothian's briefing requirements on the RHSC & DCN Little France Project and will be revisited periodically to ascertain whether the developing design meets these predefined requirements.

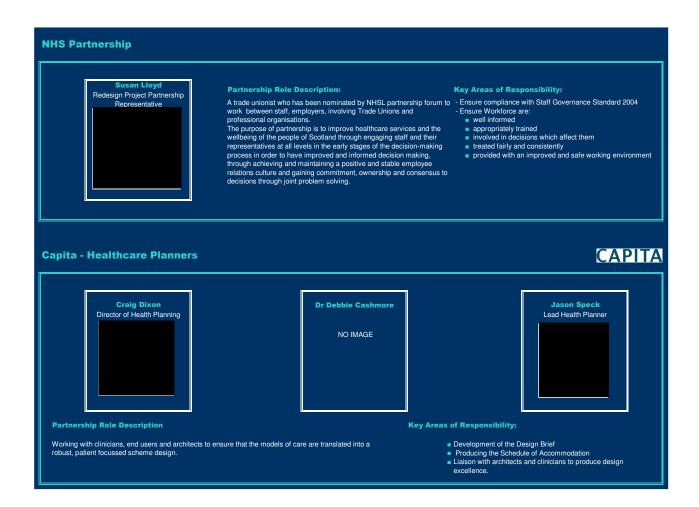
Reviews will be carried out with a representative group of users and other stakeholders at the following stages.

- Initial Briefing Stage
- During Development of the 1:500 Layouts
- During Development of the 1:200 Layouts
- Completion of the Reference Design
- During dialogue with the Preferred Bidder
- Post Project Completion ie Operational Phase

## **Appendix A**

IHSL Team		Team Roles	& Responsibilities Overview
IHS Lothian			NH
NO IMAGE	Jackie Sansbury Director of Strategic Planning and Modernisation Role Description	Key Areas of Responsibility:	TBC
	Jackie is an executive member of the NHS Lothian Board w Planning and Modernisation. In addition she is a member of and has wide participation in reviews of services at national	of the National Planning Directors Group	
	Brian Currie Project Director, Commercial Lead	Key Areas of Responsibility:	Leading Development Control Plan 1:1000/1:500  Leading Corporate Governance
	Role Description Brian is responsible for directing the project management o	f the RHSC & DCN Little France project.	Consort Negotiations Liaison Commercial Lead with Sorrel Cosens Overseeing the project overall
	Fiona Halcrow Service Project Manager  Role Description No information provided	Key Areas of Responsibility:	Leading Clinical Operational Briefs; Departmental Layouts 1:500 General Arrangements Plans 1:200; General Arrangement Elevations and Sections; Generic Room Layouts 1:50; Key room Layouts 1:50; Decontamination and Control of Infection [HAI-SCRIBE]; Corporate Design Register; ICT Strategy; Clinical Service Planning     Supporting Schedule of Accommodation; Room Data Sheets; F Strategy; Interior Design Concepts; Fire Strategy Drawings 1:200 Lighting Aesthetics
	Neil McLennan Capital Planning Project Manager, Reference Design Project Interface Role Description No information provided	Key Areas of Responsibility:	Leading Schedule of Accommodation; Room Data Sheets; Fire Strategy; Fire Strategy Drawings 1:200      Supporting Departmental Layouts 1:500; General Arrangement Plans 1:200; General Arrangement Elevations and Sections; Generic Room Layouts 1:50; Feevibility expandability; Decanting, Phasing; Security Strategy; Lift Usage Traffic Assessments; Corporate Design Register; ICT Strategy; Clinical Service Planning; PFPI + Communication
NO IMAGE	Sorrel Cosens Project Manager, Business Cases & Commercial Lead	Key Areas of Responsibility:	■ Leading Non-Clinical Operational Briefs; Wayfinding Strategy; Flexibility and expandability: Decanting, Phasing; Security Strategy; Lift Usage Traffic Assessments; Clinical Enabling in R PFPI + Communication
	Role Description No information provided		Supporting Equipment Schedules; Supplies, Storage, Distribut and Waste Management [Soft FM]; BREEAM, Traffic Impact Assessment and Traffic Management Plan; Energy Strategy + Schedules of Power, Heating and Cooling Loads; Commissionir and Testing; Non-Clinical Enabling
NO IMAGE	Graham Gillies Capital Planning Project Manager, Equipment Lead	Key Areas of Responsibility:	■ NHSL  • Leading Equipment Schedules; Interior Design Concepts; Supplies, Storage, Distribution and Waste Management [Soft FM]; BREEAM; Geotechnical Site Investigation; Traffic Impac Assessment and Traffic Management Plan; Construction Strategy; Arch Civ/Struct Specifications; Services Infrastructure Plans 1:1000/ 1:500; Integration of new and existing services; M&E Strategy drawings and statements; Plant Room Layouts; Energy Strategy + Schedules of Power,
	Role Description  D&C: Responsible for liaising between NHS Lothian and the workstream is aware of the NHS Lothian requirements and reflects the requirements of NHS Lothian.  NHSL: No information provided		Heating and Cooling Loads; Engineering Design Philosophy; Life Expectancies; M&E Eng Specifications; Commissioning and Testing; Lighting Aesthetics  • Supporting Wayfinding Strategy; Decontamination and Control of Infection [HAI-SCRIBE]; Clinical Enabling in RIE  ■ D&C  • Liaison with the full D&C work-stream  • Review of D&C documentation for compliance with NHSL requirements





## **Technical Advisory Team Team Roles & Responsibilities Overview** Davis Langdon 🔿 **Davis Langdon - Project Manager** Key Areas of Responsibility: Client Liaison Procurement Strategy NPD Peer Review NPD Advisory Service Service Delivery Quality Assurance Kevin Bradley Director (Head of PFI / PPP) Director in charge of the NPD project with overall accountability for the successful delivery of the project. As NPD Peer Review. Kevin is responsible for reviewing key documents and project deliverables associated with procurement through to construction and operation of the New Facility. Key Areas of Responsibility: Project Communications Project Reporting Programme Review Project Governance Fraser McQuarrie Associate - Lead Project Manager Role Description Primary interface and first point of contact for the Project Director on all day-to-day issues affecting the project and principal liaison with the Commission Director and Commission Manager. Responsible for the overall project governance, structures, processes, lines of communication, programme monitoring and reporting. Also responsible for the co-ordination of all work streams under the NPD process. Key Areas of Responsibility: Programme Management and Monitoring Project Co-ordination Project Communication Project Reporting Supporting the Work-Stream interfaces Project Management Project Management and Monitoring Richard Park Senior Project Manager **Role Description** Role Description: Supporting the Project Management team in terms of project wide liaison and management across the project work-streams. Responsible for routine reporting to the Project Management Executive via the Lead Project Manager. Project Management Administration Management of Project Information & Control Tools including Action/Issue Schedules, Meeting Matrix, Project Directory, PEP and associated **Key Areas of Responsibility:** Project Co-ordinator schedules, Meeting warrix, Project Directory, PEP and associated documents Preparation of monthly Project Board Report System Administration for BIW, including maintenance of the Project Calendar A key interface and co-ordination role between the Project Management Executive and the wider A key interface and co-ordination role between the Project Management Executive and the wider Maintaining a clear audit trail for the project in terms of decisions and progress produce reference material for the purpose of monitoring and controlling the project. Key Areas of Responsibility: ■ Overall responsibility for the Reference Design ■ Management and co-ordination of the design ■ Change Control – design element only ■ Interface with NHSL clinical user groups and stakeholders ■ Interface with To parties – CEC Planning and A&DS etc ■ M&E Design Manager Thomas Brady Associate - Reference Design Lead and Design Manager (M&E) ROIE DESCRIPTION Responsible for leading and managing the Reference Design team, including all sub-consultants and advisors, to produce a cohesive design. Responsible for the co-ordination of all design elements during the Reference Design stage and is the key interface between NHSL clinical and estates user groups and the design team. Key Areas of Responsibility: # Procurement Programme Preparation & evaluation of POQ submissions Invitation to Partake in Dialogue (ITPD) documentation Arrangement of Bidders conference Development of Competitive Dialogue Strategy Compilation of Competitive Dialogue Documentation Evaluation of Competitive Dialogue Documentation Development and finalisation of ITSFB documentation Development and finalisation of ITSFB documentation Development and coordinating of Eight availation procedure. Associate - NPD Procurement Manager **Role Description** Role Description Reporting to procurement lead on all day-to-day issues relating to the development and preparation of NPD procurement documentation and process. With input into the overall project, processes, programme nonlibring and reporting. Performing a key role in procurement under the NPD process. Responsible for input into and the development and preparation of: Management and coordination of Final evaluation process | Procurement Programme | Preparation & evaluation of POQ submissions | Invitation to Paratike in Dialogue (ITPD) documentation | Arrangement of Bidders conference | Development and preparation | The development of Competitive Dialogue Strategy | Development of Competitive Dialogue Documentation | Evaluation | Evaluation of Competitive Dialogue Documentation | Evaluation | Evaluatio David Cunningham Reporting to procurement lead on day-to-day issues relating to the development and preparation of NPD procurement documentation and process. With input into the overall project, processes, programme monitoring and reporting. Performing a role in procurement under the NPD process. Responsible for input into and the development and preparation of: Assistance in the development of FM Service Level Specifications Advice on FM Costings FM Input into POO documentation/ evaluation of responses. FM Input into tender documentation FM Input into competitive dialogue process Evaluation of FM tender technical and commercial responses **Key Areas of Responsibility:** Simon McLaughlin Senior Consultant – Facilities Management Consultant Role Description Providing an advisory service to the FM Work-stream, part of the core team responsible for the delivery of facilities requirements for this project. Technical adviser on Facilities Management issues covering the following key areas:









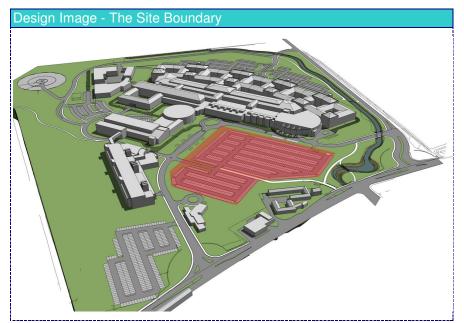
# K **Hulley & Kirkwood - Services Engineer** M&E project planningStakeholder management and communicationProgramme management Michael O'Donnell NO IMAGE Key Areas of Responsibility: **Project Lead Director** Design management Financial control **Role Description** Michael is a Chartered Engineer and Low Carbon Energy Assessor and will act as Project Lead Director. Change management ■ Project co-ordination Setting out design concepts ■ Strategic design issues in relation to all Electrical Services **David Stewart** NO IMAGE **Key Areas of Responsibility: Project Support Director** Support the Project Lead in all management areas **Role Description**David is a Chartered Engineer who will act as Project Support Director Overseeing the engineering and technical team relating to contract administration, drawing and document NO IMAGE Ronald Nolan **Key Areas of Responsibility: Project Associate** production to required deadlines **Role Description** Ron is a Chartered Engineer who will act as Project Supervisor. Undertake design of detailed dynamic simulation work as part of the Hulley SIM group Contribute towards the Low Carbon resolution and Jonathan McMillan NO IMAGE **Key Areas of Responsibility:** Design Engineer ntification of best Low or Zero Carbon Technology Role Description Jonathan's role will be as Assessor for the BREEAM Pre-Assessment checklist. Drawing productionDrawing issueClient liaison Brian Feeley NO IMAGE Key Areas of Responsibility: **CAD Technician** Technical gueries in relation to CAD design. Role Description Brian will be the main CAD contact. Michael Bryan NO IMAGE **CAD Technician Role Description** Michael will support Brian in all aspects of CAD matters and will cover client liaison and technical issues in his absence **Montagu Evans - Planning Consultant** MONTAGU EVANS ■ Providing planning advice Fraser Littlejohn **Key Areas of Responsibility:** Co-ordination of the preparation and submission of the application for planning permission in principle Primary liaison with the City Development department of the City of Edinburgh Council Lead Consultant **Role Description** Acting as planning advisers to NHS Lothian in relation to the proposed development. Providing planning advises to the application for planning permission in principle, including in relation to planning conditions and any legal agreement, and the wider planning process The City of Edinburgh Council Project management of the planning application process Providing planning advice Co-ordination of the preparation and submission of the application for planning permission in principle Primary liaison with the City Development department of the City of Edinburgh Council Project management of the planning application **Andrew Munnis Key Areas of Responsibility: Lead Consultant** Acting as planning advisers to NHS Lothian in relation to the proposed development. Providing planning advice on all aspects of the application for planning permission in principle, including in relation to planning conditions and any legal agreement, and the wider planning process

# **Appendix B**



# Royal Hospital for Sick Children & Department of Clinical Neurosciences | NPD Project Board Report | 13th May 2011 relage 327





# **Executive Summary**

#### Time

- A First Draft Strategic Programme follows indicating an operational date of May 2017 assuming a start on the reference design process on 16th May 2011. The critical path generating this period of some 6 years is the creation of a reference design, the completion and approval of an OBC, the successful selection of three bidders following a PQQ process through the OJEU, a Dialogue process to select a preferred bidder and eventual construction and commissioning. Satisfactory conclusion of all relevant issues with Consort Healthcare prior to submission of OBC is also essential.
- It should be noted that this programme will be under continuous review and any opportunity to bring forward the final operational date will be taken.
- Work is underway to develop and agree detailed programmes for all work-streams supporting this Strategic Programme and many more tasks and dependencies will be added during the next few weeks.

#### Cost

■ A full cost update will follow in future Project Reports once sufficient information is available. This will build on the early cost forecasts contained within the Addendum to OBC issued to SGHD on 23rd March, 2011

### Quality

- The Technical Advisor and Financial Advisor have been successfully procured using the OGC Buying Solutions Framework and a team structure is attached identifying key named individuals. Unfortunately, a co-located project team office is not possible given financial constraints and the team will be based primarily in Mott MacDonald's and Davis Langdon's offices with clinical interface at Rillbank Terrace. A Legal Advisor remains to be secured.
- Project Governance procedures in relation to the Corporate Requirements, Project Team and Project Processes will be covered in the PEP (Project Execution Plan) currently being finalised for distribution and comment.
- A Project Brief comprising Operational Requirements, Adjacency Matrix, Accommodation Schedule and Assumptions has been prepared by NHSL and will be released to the designers on 16th May, 2011. However, much work remains to be done on associated work-streams necessary to close out essential clinical enabling works within the RIE.
- The Reference Design main deliverable is an approved architectural design fully illustrating clinical functionality in three dimensions with all known site and infrastructure constraints clearly stated. This design whilst being entirely credible in structural, fire and building services engineering terms will not seek to dictate solutions in this regard. The design team are currently developing the complete schedule of deliverables with NHSL whilst commencing the design process.
- The design process particularly in relation to the engagement with clinical and client management teams has been prepared and builds on the work done over the last 18 months (copy attached).

# **Technical Advisor Commentary**

- The appointment of MML through the Buying Solutions Framework has now been completed with only the final wording of the Parent Company Guarantee to be agreed. The Sub-Consultant Agreements for TG and TTPM have been finalised. The agreement for the appointment of DL is to be finalised w/c 9 May 2011. Fee proposals have been received from the proposed Reference Design Team. These appointments to be made through DL will be finalised upon agreement of scope with the exception of the Healthcare Planning appointment which is to be subject to a further tendering exercise.
- The TA team has commenced work in developing the procurement programme and establishing the terms of reference for each of the work streams. The TA team also attended a workshop with NHSL on 3 May 2011 examining the programme for the procurement phase and agreeing the approach to developing roles and responsibilities for the Work-stream. The project execution plan is approximately 60%. MML has been working with NHSL to develop and agree the brief for the Reference Design.

# Stakeholder Management and Communication / Strategic and Workforce Planning

- Staff Open Sessions programmed to commence w/b 9 May 2011.
- Re-provision Workforce Task Group meetings have been postponed since the latter stages of 2010. These will re-commence once project fully underway.





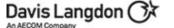


# Clinical Update / Equipment

- Adjacency Relationship Matrix work being progressed with services.
- Draft Schedule of Accommodation prepared.
- Work progressing with the review of clinical and non-clinical operational procedures.
- Request with the TAs to finalise the 1:50 Detailed Design Process of the stand-alone building to allow completion of the Room Data Sheets.
- Reference Design Structure (NHS Lothian Internal) finalised and Sub Task Groups identified. Lead and Deputies being formalised.
- DCN equipment lists are being pulled together at this stage using the RHSC ADB sheets. Meetings will be arranged with users to confirm equipment.
- Meeting arranged with Capital Planning Equipment manager to pull together costs for equipment.

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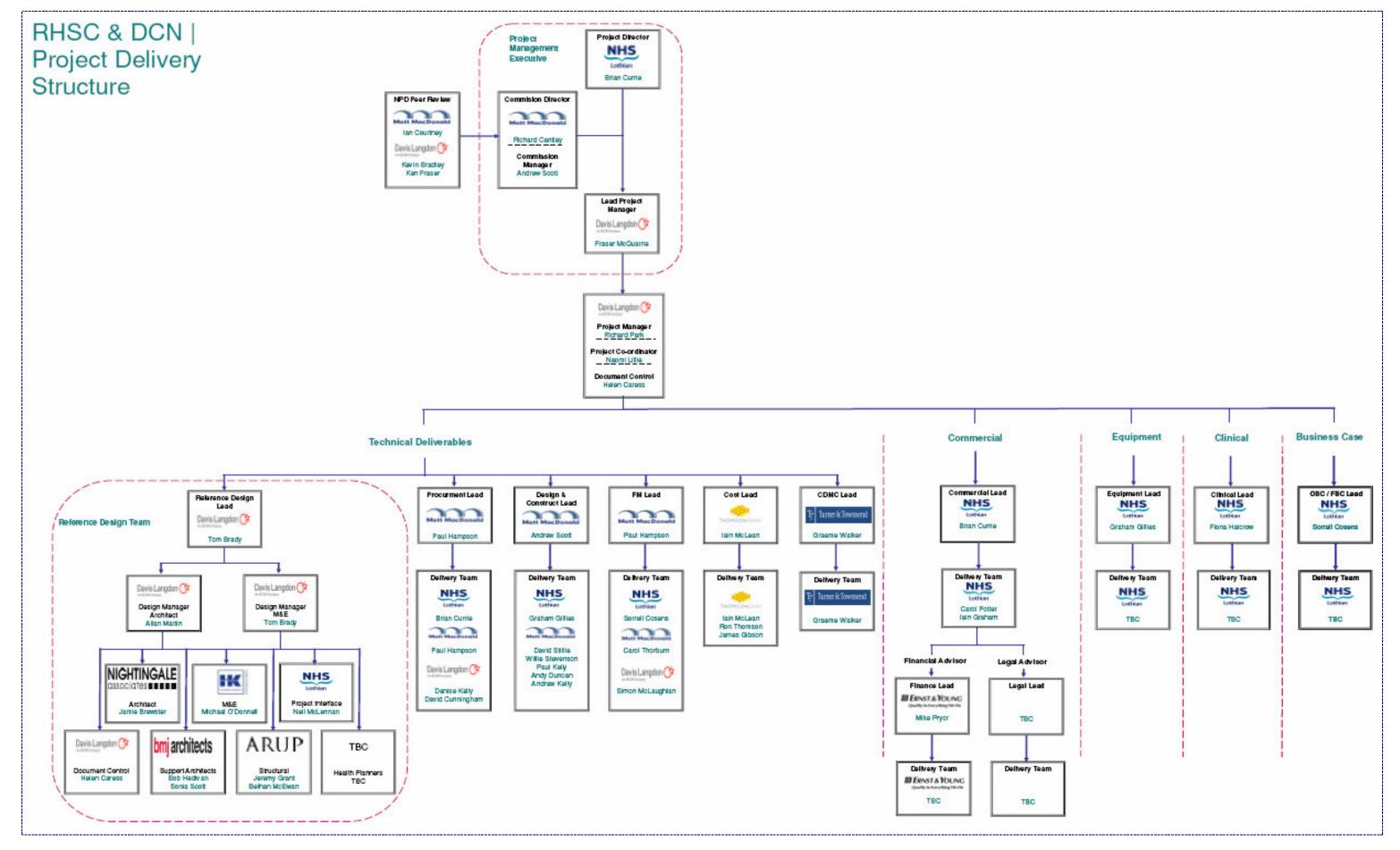
HFS - RHSC stand-alone scheme ke	ey milestones
Concept Design - 1:500 sign off	08/03/2010
Scheme Design - 1:200 sign off	30/07/2010
Detailed Design - 1:50 sign off	20/11/2010
Cost Plan sign off	28/01/2011
Planning Submission	08/11/2010
Submit FBC to NHSL	07/02/2011
FBC Approval by NHSL	07/02/2011
Submit to CIG	08/03/2011
CIG Approval	14/03/2011
Construction Start	01/06/2011
Construction Work Complete	09/09/2013
Hospital Going Live	29/11/2013

NPD - RHSC & DCN key milestones						
Reference Design Brief	02/05/2011					
Concept Design 1:500 & Approvals	23/05/2011					
Scheme Design 1:200 & Approvals	26/09/2011					
SGHD Approval of OBC	15/11/2011					
SGHD Approval of FBC	07/01/2014					
Planning in Principle Granted	22/11/2011					
Detailed Planning Granted	13/11/2013					
Car Park B Transfer Deadline	21/12/2011					
Project Information Notice	22/09/2011					
Bidders' Day	26/01/2012					
Release OJEU Notice	16/11/2011					
PQQ Period	26/01/2011					
Select Short-list Bidders	03/05/2012					
CD - Open Dialogue	07/05/2012					
CD – Interim Process	10/05/2012					
CD – Final Tenders	07/12/2012					
CD – Evaluation	22/02/2013					
Appoint Preferred Bidder	15/07/2013					
Commercial Close	10/09/2013					
Financial Close	19/02/2014					
Construction Start	01/03/2014					
Construction Work Complete	01/03/2017					
Hospital Going Live	01/05/2017					

















# Royal Hospital for Sick Children & Department of Clinical Neurosciences | PM Report | 13th May 2011

# Reference Design

- DL approached the design team that worked on the previous stand alone RHSC scheme to appoint them directly as the Reference Design Team which would be 'ring fenced' in order not to preclude them from joining a bid team further down the procurement line.
- DL has now been given commitment from all designers that they do wish to join the Reference Design Team and have now submitted fee proposals to DL for acceptance.
- DL is currently liaising with the design team in regards to appointing them contractually on a back-to-back basis.
- DL has been asked to fulfil the management role previously undertaken by BAM to lead the design process. DL has appointed Tom Brady and Allan Martin as the design management team.
- NHSL requested a separate document-controller for the design process. This role will be undertaken by Helen Caress from DL.
- The Design Team has produced a programme showing a 12 month duration to complete the Reference Design, based on the schedule of deliverables issued via NHSL on 13/04/11 and on three rounds of consultation meeting with the clinical staff. This is currently being looked at in order to reduce the timescale to an eight month period, one agreement being that clinical consultation will be reduced to two rounds.
- NHSL has asked that the design team complete the 1:50 design stage from the previous RHSC stand-alone scheme; once appointed, DL will instruct accordingly.

### Procurement

• An initial NPD Procurement meeting is being held on 11 May 2011 to discuss the NPD documents. In the interim, members of the Work-stream have been advising and agreeing the logic for the procurement programme and identifying issues that will require clarification and guidance for the legal advisers once appointed.

# Design & Construct

Information to follow once project fully underway.

# acilities Management

Information to follow once project fully underway.

# Health & Safety / CDMC

 An F10 notification for the project will be raised with the Health and Safety Executive shortly to reflect the details of the new project.

## Commercial

This section will be populated by Ernst & Young in conjunction with NHSL Finance when a sufficient level of information becomes available from the reference design process.

# Business Case

An Addendum to OBC was issued to SGHD on 23rd March 2011 and comment / query has been received. The relevant points, with the exception of some financial issues, have been dealt with.

# Key Activities over the next 4 weeks

- Appoint TA support team MMc
- Appoint Reference Design Team DL
- Issue revised PEP DL
- Agree strategic programme All
- Finalise new meeting matrix DLFinalise new roles & Responsibilities DL
- Complete project brief and operational policies NHSL
- Complete 1:50 exercise for previous stand-alone scheme DL

- Refine design deliverables NHSL/MMc
- Conclude Consort negotiations SA6 NHSL

# Project Administration

- The draft PEP can now be issued. DL awaiting input from other parties of the TA and NHSL teams.
- BIW web portal has now been established for the new joint RHSC & DCN scheme.
- Meeting held on 10th May between DL and NHSL to agree a Meeting Matrix.
- DL to issue new Project Directory.
- Design Team meetings will be held in DL Edinburgh office, work-space will be made available exclusively for the Design Team.

# Enabling Works

Project Management

Car-park F bio-quarter plots 14-16 - This will provide 1,200 car parking spaces. Completion date is 17/06/2011, the project is on-target and within budget. There were initial delays due to poor weather over winter, but this should be absorbed. The most significant risk was temporary works to HV cables - these caused slight delay which has been absorbed in the programme and the issue closed out.

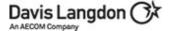
# Consort

- Car Park F enabling work The contractor is continuing to construct the bridge from the existing RIE site into the new car park F. Work is on programme for completion for the 17/6/11.
- Car Park F The contractor is making reasonable progress with the car parking spaces, pavements and roads. The second bridge is also on schedule to be completed on the 17/6/1. The burn diversion is complete and the SUDs basin will be complete by the end of the week.
- Car Park B Diversions work The contractor is slightly behind with the gas mains diversion. This is down to problems with locating the deep existing pipe work. The rest of the work is moving along to schedule.

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not disclosable under the Freedom of Information (Scotland) Act 2002





# **Appendix C**

# **Contract Control Order No**

290961/

# Title

# **Dated**

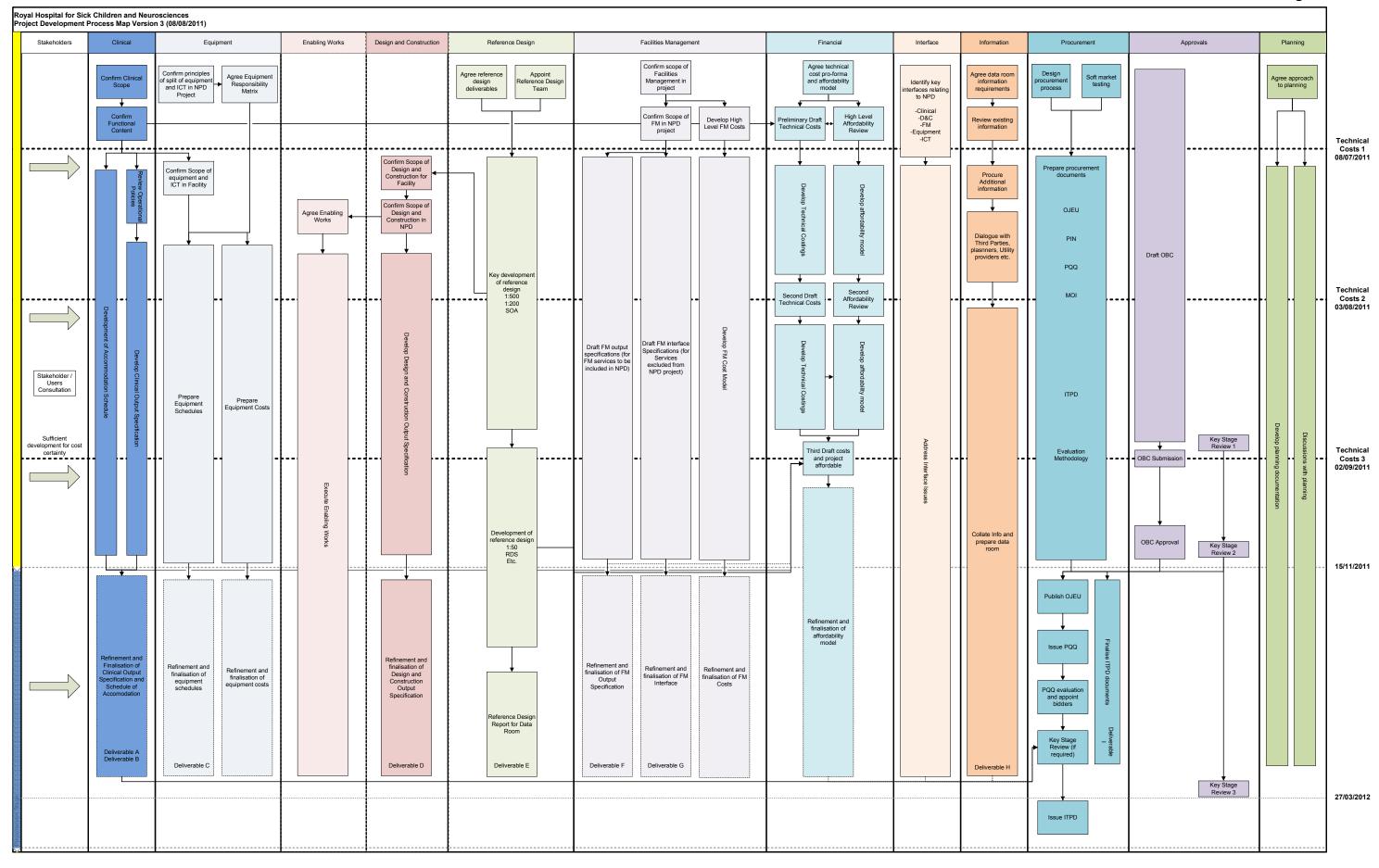


Project Title	NPD Project for RHSC/DCN at Royal	Infirmary Edinburgh for NHS Lothian	
Source of Cha	ınge		
Description a	nd Reason for Change		
Consequentia	l Changes		
Effect on Prog	gramme / Schedule		
Cost Summar	y (based on Schedule 2-3 of the	Contract – Services and Fee Schedule)	
Estima	ted change in Labour Costs:		
Estima	ated change in Direct Costs:		
Estim	nated change in Total Costs:		
New es	timated total project Costs:		
	(Currently all as contract.)		
_	r changed Ordered Services ns to be in accordance with Clause 43 of the Contract		
Additional Wo of present sco	s considered to comprise:  ork  ope of work  existing wo <u>rk</u>	Clarification Release of	f
information and o		n and record. Please sign and return one copy. Further Please provide your comments in writing within 10 days to proceed with the above change.	
Signed for Mott N	MacDonald Limited	Signed for NHS Lothian	

		Page 333
Date:	Date:	3 - 3

Distribution: NHSL (PD,PM); Relevant Sub Consultants; MML (PD,PM,PPW,Relevant Staff, PiMS CC)

# **Appendix D**



Technical Costs 1 – Agreement of format of costing pro-formas and initial indication of "ball park" figures.

Technical Costs 2 – 1st formal draft technical costs based on detailed work carried out to that date.

Technical Costs  $3 - 2^{nd}$  formal draft technical costs based on detailed work carried out sufficient for OBC purposes.

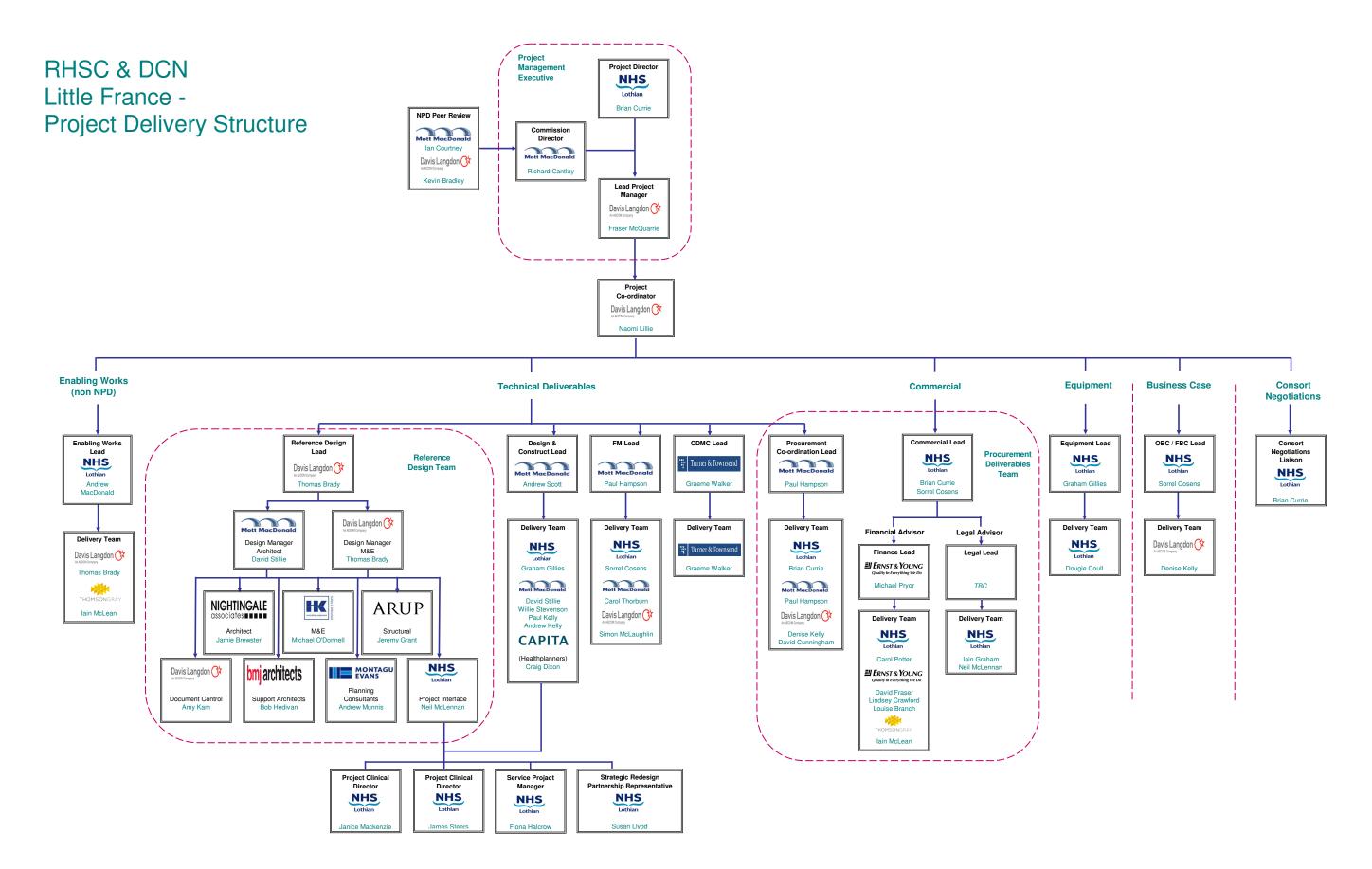


# **Appendix E**

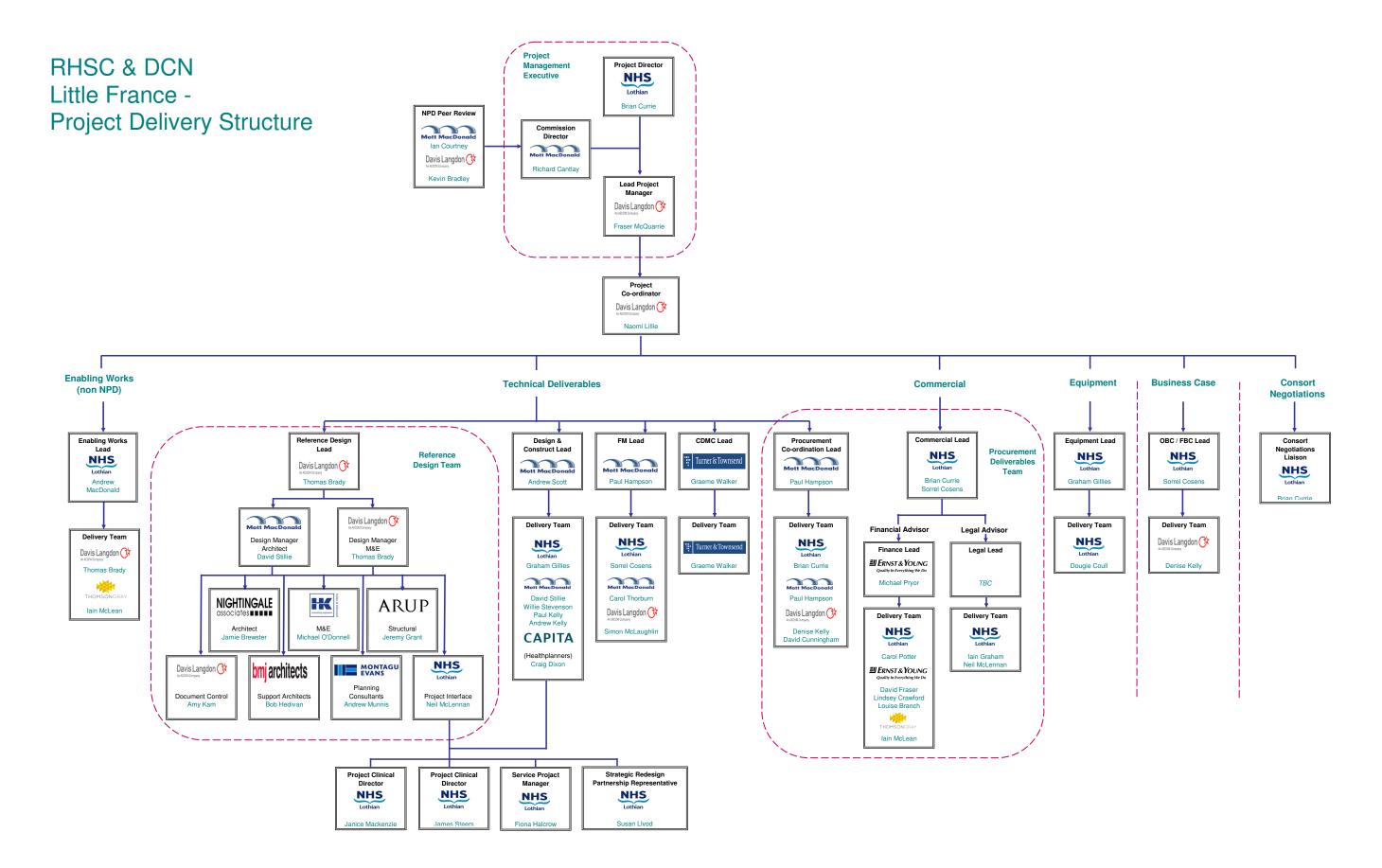
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O = Organiser / primary point of contact	<u>~</u>		i ii								72				
D = Included in distribution for information			Con								Ö				
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Carol Potter	A	A	A	A	U	A(I)		A	A				A		Α
Christine McGeechan	D	D	D	D				D	D		D		D		D
Fiona Halcrow Graham Gilles		Δ		Α		A(r)				Λ				С	
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James Steers															
Janice Mackenzie Kenneth Ngai						A(r)						A(r)	Α		Α
Neil McLennan			Α			Α	Α					A(r)	^	Α	
Sorrel Cosens		A		A								À	Α		С
Susan Lloyd (Partnership) Zuzana Stofankova	A	A		Α							Α				A
DAVIS LANGDON															
Allan Martin						Α	С			A(r)					
David Cunningham Denise Kelly									A A						
Fraser McQuarrie	С	С		A(r)	Α			Α	^		A(r)		Α		
Helen Caress						A(r)									
Ken Fraser Kevin Bradley					Δ										
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Sonia Scott HULLEY & KIRKWOOD						Α	A								
Michael O'Donnell						A	A				A(r)				
Ron Nolan															
David Stewart															
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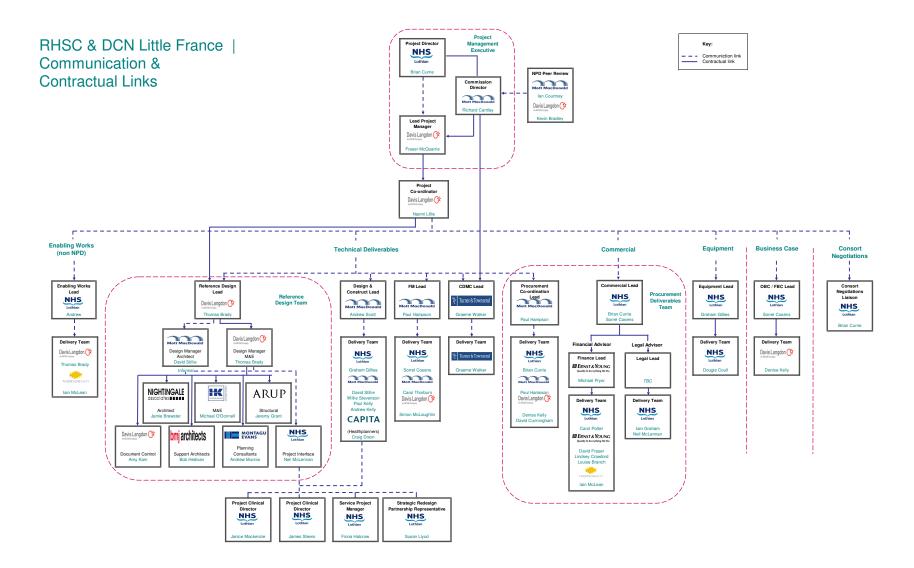
NHS								RHSC & DCN							
Meeting Matrix			PM Executive					Те	chnical Deliverab	les			Commercial	Equipment	<b>Business Case</b>
28/06/2011							Reference Desig	n	Procurement Co-ordination	Design &	Construct	Facilities Management	Work-stream	Work-stream	Work-stream
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Meeting Organiser:	NL	NL	NL	NL	NL	ТВ	ТВ	FL	PH	AS	AS	PH	CMcG	CMcG	CMcG
Frequency:	F	М	2-M	М	3-M	F (to Dec 2011)	TBC	W (to end July 2011)	F	F	A/h	F	F	F	F
Meetings Scheduled in BIW:															
Key to initials:  N = Weekly = Fortnightly M = Monthly Q = Quarterly A/h = Ad hoc C = Chair A = Attendee A(r) = Attendee, as required D = Organiser / primary point of contact D = Included in distribution for information	Project Management Executive	Work-stream Progress	Commission Management (finance admin)	Risk	Peer Review	Design Work-stream	BREEAM Strategy	Town Planning	Procurement Co-ordination Work-stream	D&C Work-stream	Clinical & Non-Clinical Enabling Works (non NPD)	FM Work-stream	Commercial Work-stream	Equipment Work-stream	Business Case Work-stream
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# **Appendix F**



# **Appendix G**









# Royal Hospital for Sick Children & Department of Clinical Neurosciences at Little France Project NHS Lothian



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# Document Issue

Issue:	File Path:	Date:	Prepared:	Checked:	Reviewed:
1	Stored on BIW	01.06.2011	RP & NL	FMcQ	To be reviewed by all leads
1.1	N/A	12.08.2011	RP	AM	Internal Review
1.2	N/A	19.08.2011	RP	RC	Internal Review
1.3	Stored on BIW	23.08.2011	RP	FMcQ	Issued to NHSL for SFT Review
2.0	Stored on BIW	06.09.2011	RP	FMcQ	Issued to NHSL and Work- stream managers
2.1	Stored on BIW	28.09.2011	NL	-	Issued to Business Case Lead for inclusion in OBC
2.2	N/A	17.11.11	NL	RP	Internal Review
3.0			RW		

# Schedule of Revisions

Revision:	Date:	Details of Revision:	Revised By:
Draft 1.	01.06.2011	Updated draft for review / comment	RP
Draft 2.	06.09.2011	Update to reflect feedback and project status	RP
Draft 2.2	17.11.11	General update and proofing	NL

# 1. Introduction

# 1.1 Project Name

The name of this project is Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France, and is abbreviated to RHSC + DCN – Little France.

# 1.2 Purpose of the Document

This Project Execution Plan (PEP) is intended to impart to all parties involved in the project a clear understanding of how they interact with each other, and sets out the governing strategy, organisation, control procedures and roles and responsibilities for the project. The document provides a concise introduction to the project for new team members in terms of how the project will be delivered.

It is intended that this document will be a working document, amended and further developed during the progression of the project, with revisions issued as appropriate. Davis Langdon, an AECOM Company (DL), will be responsible for developing the document with input from the various parties of the project.

All parties involved in or associated with the project are requested to comply with the contents of this PEP. Any issues which may result in necessary amendments, amplifications or improvements to practices or procedures contained herein should be raised for discussion with all parties.

## 1.3 Precedence of Document

If any matter within this document is at variance with any Contract or Agreement signed by NHSL Board relating to the execution of the works, then that which is contained within such Contract or Agreement will be deemed to take precedence. Any such variation should be reported to DL in order for the necessary amendments to be made.

#### 1.4 **Acronyms and Abbreviations**

AEDET	Achieving Excellence Design Evaluation Toolkit
CA	Company Administrator
CAMHS	Children and Adolescent Mental Health Services
CIG	Capital Investment Group
CDM	Construction Design Management
DCN	Department of Clinical Neurosciences
DL	Davis Langdon, An AECOM Company
EY	Ernst & Young
FBC	Full Business Case
ITPD	Invitation To Participate in Dialogue
KSR	Key Stage Reviews
MM	Mott MacDonald Limited
NHSL	National Health Service Lothian
NPD	Non Profit Distribution
NSD	National Services Division
OBC	Outline Business Case
OGC	Office of Government and Commerce
PARU	Paediatric Acute Receiving Unit
PEP	Project Execution Plan
PFPI	Patient Forum and Public Involvement
PIC	Project Information Co-ordinator
PME	Project Management Executive
PSC	Professional Services Contract
RDT	Reference Design Team
REH	Royal Edinburgh Hospital
RHSC	Royal Hospital for Sick Children
RIE	Royal Infirmary of Edinburgh
SFT	Scottish Futures Trust
TG	Thomson Gray Partnership
TT	Turner & Townsend
WGH	Western General Hospital

# 2. Project Introduction

## 2.1 Background

The NHSL Property and Infrastructure Strategy for 2011-15 recognises that the RHSC and DCN require significant modernisation to ensure an appropriate environment for the provision of high-quality paediatric and neuroscience services. Physical building and site constraints, together with practical phasing difficulties, limit the ability to achieve such modernisation in a successful and cost effective manner on the current respective sites.

## RHSC

The 2011-15 property strategy reports that it would be uneconomic and highly disruptive to adapt the existing site to achieve the required improvements at RHSC: the current buildings are no longer appropriate as healthcare facilities in the 21st century. Overcrowding is also reported as a problem, referring to the report by the Scottish Child Health Support Group in 2003, that 'continued investment [in the RHSC] would be unproductive in the long term and it is clearly no longer fit for purpose'.

Re-location of the RHSC to Little France, next to the Royal Infirmary of Edinburgh (RIE), would ensure the safest possible hospital care for children.

#### DCN

Key issues for DCN highlighted in the 2011-15 property strategy were that outdated existing facilities did not meet patient expectations of 'fit for purpose', and that there was pressure on existing DCN services and facilities to meet activity demand. Against health and safety criteria the accommodation narrowly achieved a satisfactory rating; the physical condition and energy efficiency of the build was judged unsatisfactory.

Re-location of DCN to Little France will deliver national clinical strategy to co-locate adult and paediatric neurosurgery on the same hospital site, and also on the same site as Lothian's principle Emergency Department in the Royal RIE.

The re-provision of the Royal Hospital for Sick Children and Department of Clinical Neurosciences, within a combined facility at Little France, is a key part of the NHSL's strategic capital investment programme. NHSL will procure the project through the Scottish Government Non Profit Distributing (NPD) model.

The new building will be located alongside the RIE on the Little France site.

# 2.2 The Project Brief and Scope

# 2.2.1 RHSC Existing Facilities Overview

The Royal Hospital for Sick Children, Edinburgh, is currently based at Sciennes, near Edinburgh city centre. It was originally built in 1895 and has had several structural developments over the last 100 years. The Hospital and many of the surrounding houses, which are owned by NHSL or by NHSL Endowments, are listed buildings.

The services that at present are provided by the Royal Hospital for Sick Children site are:

Children's services provided in RHSC			
Emergency Department	Haematology / oncology	Ophthalmology	
Ambulatory paediatrics	Inherited metabolic disease	Paediatric Liaison psychiatry / psychology	
Audiology	Paediatric Intensive Care	Paediatric Pharmacy	
Anaesthesia	Paediatric High Dependency	Paediatric physiotherapy	
Burns	Infectious diseases	Paediatric Radiology	
Cardiology (inpatient facility in Yorkhill)	Intensive Care Retrieval (NSD contract)	Paediatric Respiratory medicine	
Child protection	On-site laboratories – haematology	Renal medicine	

	/ biochemistry	(outreach from Yorkhill)	
Chronic pain service	Maxilo-facial surgery	Paediatric Rheumatology (outreach from Yorkhill)	
Cleft lip and palate surgery (NSD MCN)	Paediatric medicine	Pain Management	
Day surgery	Neonatal surgery	Speech and language therapy	
Paediatric Dietetics	Neurosciences (neurology / neurophysiology/neurosurgery)	Paediatric general surgery	
Endocrinology & diabetes	Occupational therapy	Paediatric spinal deformity surgery	
Genetics	Oral surgery	Specialist neuro-developmental paediatrics	
Gastroenterology	Outpatient services	Theatres	
Services shared with adult service but provided on-site at RHSC			
Dentistry	Neurosurgery	Orthotics	
Dermatology	Orthopaedics	Plastic surgery	
Ear, Nose and Throat			

The current 12-bed inpatient unit for Child and Adolescent Mental Health Services (CAMHS) is located on the Royal Edinburgh Hospital (REH) site. Day case children's services are currently based at Forteviot House, Hope Terrace and comprise 2 Victorian villas which have been connected together.

#### **DCN Existing Facilities Overview** 2.2.2

The Department of Surgical Neurology opened in a purpose-built facility in the Western General Hospital (WGH) in 1960. The facility was re-named the Department of Clinical Neurosciences (DCN) in 1987 when neurology moved to WGH.

The services that at present are provided by the Department of Clinical Neurosciences are:

Neurological services provided in DCN			
Diagnostic Neuroradiology	Neurophysiology	Pre-Admission Clinic	
Dietetics	Neuropsychiatry	Programmed Investigation Unit	
Edinburgh Centre for Neuro-oncology	Neuropsychology Physiotherapy		
Neurosciences High Dependency Unit	Neurosurgery	Speech and Language Therapy	
Interventional Neurovascular Radiology	Occupational Therapy	Theatres and Anaesthesia	
Neurology	Outpatients Department		
Other NHSL services provided on WGH site for DCN			
Chronic Pain Service	Pharmacy, WGH	Intensive Care Unit, WGH	
Health Records			

## Summary of Client Brief

The new combined facility will be sited at Little France. The gross floor area of the new combined build as detailed in the feasibility study is estimated at approximately 50,000 square metres (m2). The RHSC project has an approved OBC and was based on procurement through Framework Scotland. The design for this stand-alone facility was well advanced and three rounds of user-groups meetings had been conducted resulting in the sign-off of a design to 1:50 detailed design stage (equivalent to RIBA Stage E). The DCN project is not as developed, either in terms of design or business case production. Outline design information, including Schedules of Accommodation, has been developed in order to support a draft OBC. As part of the Scottish Government 2010-2011 Budget announcement, the RHSC and DCN schemes were announced as forming part of the new NPD pipe-line. Consequently, clinical and building elements of the previously proposed stand-alone buildings will now be combined.

#### 2.2.4 Strategic Objectives

The anticipated outcomes and benefits from the development for NHSL reflect the quality ambition for NHS Scotland to provide appropriate services for all, at the right time, in a suitable environment with minimal waste or harm. This includes:

- High-quality clinical care for patients that is timely, accessible and consistently available;
- The provision of a purpose-built state-of-the-art with improved facilities and age-appropriate environments patients, carers and staff.
- The most efficient and effective use of resources to support service modernisation and development;
- Sustainable core and specialist emergency and elective service, and local, regional and national services;
- Strong relations with the University of Edinburgh's College of Medicine and their activities at Little France, and with the BioQuarter research park development.

In addition to the universal benefits above, RHSC patients and services will benefit from:

- Co-location with acute adult, maternity and neonatal services where the support of clinicians from across different specialities will be available.
- Improved planning and processes for patient transition from paediatrics to adult services, leading to improved pathways of care for patients and families;
- Retention of children's neurosurgical service which depends on the co-location of the adult neuroscience service.

### CAMHS patients and services will benefit from:

- Improved patient care for children and young people with both mental health and physical illnesses. Physical colocation will support faster diagnosis and treatment;
- Professional benefits to CAMHS staff and paediatricians of working alongside each other, reducing the risks of professional isolation and improving the dialogue between colleagues;
- Reduction in the stigma young people associate with mental illness by being treated on the same site as all other children and young people.

# DCN patients and service will benefit from:

- Neurosurgery on the same site as an Emergency Department;
- Co-located adult and paediatric neurosurgery on the same hospital site.

#### 2.2.5 Project Parameters and Key Issues

One of the key constraints of this project is that the footprint and massing of the hospital will be constrained by existing buildings, services and infrastructure on the RIE site. These include:

- Physical Link connection to the Emergency Department within the RIE hospital;
- Road Network potential realignment of the existing network may be necessary to maintain a workable hospital layout. The potential impact on cars, ambulance / emergency access and buses during construction will be managed;
- Utilities the proposed service strategy will be to create new independent utility supplies including drainage, water, gas, electricity and communications, with the ultimate objective of delivering an autonomously-serviced department;
- Niddrie Burn and Other Water Courses a key constraint to the south and east of the site, together with realignment plans by City of Edinburgh Council to the east;
- Site Conditions data from the RIE development and site investigations on the adjoining land is available, suggesting restrictions in some areas;
- Car Parking the maintenance during construction and the operation of sufficient car parking will require cognisance of the neighbouring developments and planning restrictions. Fully accessible and, where appropriate, managed car parking for the RHSC / DCN patients and staff to be balanced with planning requirements (e.g. Green travel planning) and site capacity limitations. The opportunities for maximising collaboration with neighbouring developments and public transport servicing will be pursued;
- Height the current development plans include a development height restriction of three floors, based on "lines of sight" from Old Dalkeith Road and maintaining the uninterrupted ridges of Craigmillar Castle and Edmonston. The increased building footprint and formation of an independent energy centre and service yard will extend the building constraints and ultimately breach the defined sky-line policy. This will need to be carefully managed with the City of Edinburgh Council Planning department and Architecture and Design Scotland [Update this bullet];
- Clinical Services the clinical services at RIE require continued function and cannot be disrupted;
- Access To Existing Amenities and Public Services access to existing services on the Little France site (for patients, staff, visitors, public transport and suppliers) will require to be maintained throughout the project;

Full Planning Permission – yet to be granted for the project and this may be influenced by the permissions required for the whole of the Little France future master-planning of the site. This work is underway for Little France incorporating the plans for re-provision of the RHSC and DCN. This work has to be aligned to the overall master-plan for the Bioquarter development, and is at an advanced stage. This will have to be considered in full detail in relation to the sitewide traffic management strategy.

# 2.3 Project Delivery

# 2.3.1 Overall Project Delivery

The Client has contracted Advisers to support the Project Delivery in the following way:

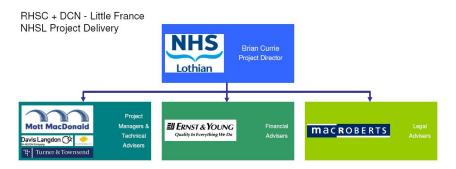


Figure 1: NHSL and Advisers Project Structure

The NHSL Delivery Team will be working alongside the Advisory Teams to deliver the project. The NHSL Team is set up as follows:

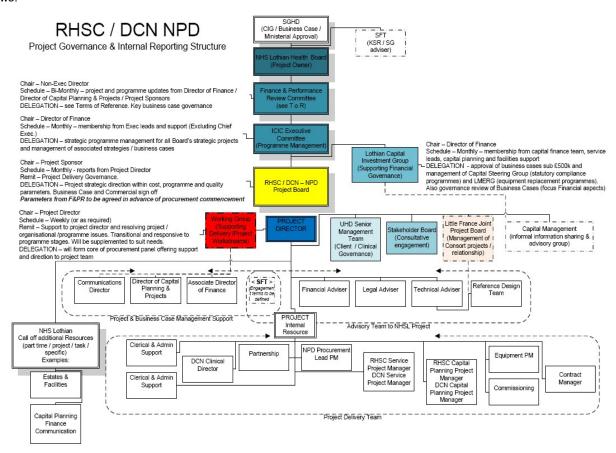


Figure 2: NHSL Delivery Team

# Advisory Services Contracted by NHSL

The form of Contract for the Project Management & Technical Advisory Team during the pre-construction delivery phase is the Standard Model Contract on OGC Buying Solutions Framework Agreement RM457/1, signed 20th Oct & 2nd Nov 2009 (framework agreement).

The Contract is agreed between the following companies:

- Employer NHS Lothian
- Project Manager & Technical Adviser Mott MacDonald Limited

Mott MacDonald Limited has engaged the following companies in sub-consultancy agreements to comprise the Project Management & Technical Advisory Team:

- Project Manager / Facilities Management / Procurement Davis Langdon
- CDM Co-ordinator Turner & Townsend
- Cost Adviser Thomson Gray Partnership
- Health Planner Capita

### **Project Organisation Structure**

The second stage of the project commences with the issue of the OJEU (or Contract notice) calling for Candidates to pre-qualify for the Competitive Dialogue period. The key activities in this stage include; the PQQ evaluation and short listing process, the completion and issue of the Invitation to Participate in Dialogue, the Competitive Dialogue period itself with the short listed Candidates including submissions plus the final tender and evaluation period, appointment of the preferred bidder, preparation of the FBC, and final planning approval before reaching Financial Close.

Stage 2 will include a series of workshops for those involved in the evaluation team, to go through the evaluation process in detail. During this stage, following the issue of the OJEU, a Bidder's Day will also be held to present the project to interested parties and share information on the reference design work undertaken to date. This will involve representatives from the senior management and project teams as well as the advisers to discuss the Project with potential partners.

Below two diagrams are given:

- 1) The Project Delivery Organisational Structure diagram sets out the structure of the project, identifying the key roles, Workstream Leads and organisations involved in the delivery and management of the project in the two separate stages;
- 2) Communication and Contractual Links portray the primary lines of communication as well as contractual links, and the formal communication is expounded upon in section 4.1.

These diagrams are included as Appendices F and G.

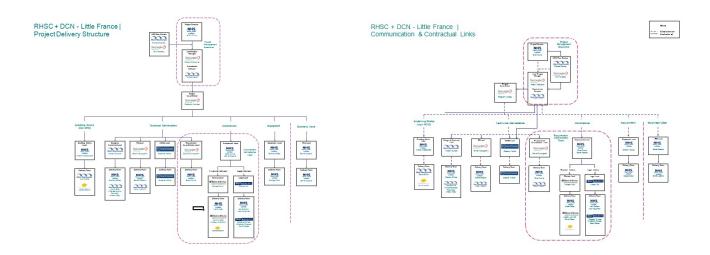


Figure 3: Organisation Structure

Figure 4: Communication and Contractual Links Structure

# 2.5 The Project Team

The Leads for the Project and Work-streams are identified as follows:

Company	Title	Forename	Surname	Notes
NHSL	Project Director, and	Brian	Currie	
	Commercial Lead			
NHSL	Business Case Lead	Sorrel	Cosens	
NHSL	Equipment Lead	Graham	Gillies	
NHSL	Enabling Works Lead	Andrew	MacDonald	
NHSL	Clinical Lead –	Janice	Mackenzie	
	<mark>Paediatric</mark>			
NHSL	Clinical Lead – Neuro-	James	Steers	
	sciences sciences			
Mott MacDonald	Peer Review	Richard	Cantlay	
Mott MacDonald	Procurement Co-	David	Cunningham	
	ordination Lead			
Mott MacDonald	Commission Manager	Andrew	Scott	
Mott MacDonald	Design & Construct	Andy	Duncan	
	Lead			
Mott MacDonald	Design & Construct –	David	Stillie	
	Architecture Lead			
Davis Langdon	Peer Review	Kevin	Bradley	
Davis Langdon	Lead Project Manager	Fraser	McQuarrie	
Davis Langdon	Facilities Management	Simon	McLaughlin	
	Lead			
Thomson Gray	Cost Consultancy Lead	James	Gibson	Rod Shaw also leads
Turner & Townsend	CDM Co-ordinator	Graeme	Walker	
	Lead			
Ernst & Young	Commercial –	Michael	Pryor	
	Financial Lead			
MacRoberts	Commercial – Legal	Andrew	Orr	Duncan Osler also leads
	Lead			

The Delivery Team members are as follows:

Company	Title	Forename	Surname	Notes
NHSL	Reference Design,	Neil	McLennan	
NHSL	Clinical Support	Fiona	Halcrow	
NHSL	Cost Management	Kenneth	Ngai	
NHSL	Cost Management and Commercial	Carol	Potter	
NHSL	Commercial	lain	Graham	
NHSL	Equipment	Dougie	Coull	
NHSL - Partnership	Clinical Support	Susan	Lloyd	
Mott MacDonald	Design & Construct	Willie	Stevenson	
Mott MacDonald	Facilities Management	Carol	Thorburn	
Mott MacDonald	Mechanical & Electrical	Willie	Stevenson	
Mott MacDonald	Mechanical & Electrical	Paul	Kelly	
Mott MacDonald	Civil & Structural Engineering	Robert	Neil	
Davis Langdon	Project Co-ordinator	Rebekah	Wendes	
Montagu Evans	Planners	Fraser	Littlejohn	
Montagu Evans	Planners	Andrew	Munnis	
Ernst & Young	Commercial – Finance	David	Fraser	

Ernst & Young	Commercial – Finance	Lindsay	Crawford	
MacRoberts	Commercial – Legal	Margaret	Kinnes	
MacRoberts	Commercial – Legal	Kimberley	Russell	
MacRoberts	Commercial – Legal	Robin	Fallas	

### Roles & Responsibilities

Detailed roles and responsibilities for each individual within the core project team are given in Appendix A. Noted below is an overview of each organisation's main functions.

#### Employer - Lothian Health Board (known as NHS Lothian) 2511

NHSL is responsible for providing health and treatment services for the population of the Edinburgh and the Lothian's. NHSL is the Employer for the Project.

Refer to 'Figure 1: NHSL and Advisers Project Structure' at 2.3.1 for details.

The Clinical Management Teams (CMT) have operational management responsibility for children's services and DCN, and as part of this, are key players in the RHSC + DCN - Little France project.

## NHS Lothian Staff Partnership

The purpose of Partnership is to improve healthcare services and the wellbeing of the people of Scotland, by engaging staff and their representatives at all levels in the early stages of the decision-making process. This is in order to have improved and informed decision-making, through achieving and maintaining positive and stable employee relations, and gaining commitment, ownership and consensus to decisions via joint problem solving.

Partnership's key areas of responsibility include ensuring compliance with Staff Governance Standard 2004, and that the workforce is well informed, appropriately trained, involved in decisions which affect them, treated fairly and consistently and provided with an improved and safe working environment.

# Mott MacDonald Limited

Mott MacDonald Limited has been appointed as the lead consultant and will deliver the following services:

- Lead Strategic advice;
- NPD Procurement advice;
- Facilities Management advice;
- Design and Construction advice.

#### 2.5.1.3 Davis Langdon, An AECOM Company

Davis Langdon has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Project Management services;
- NPD Procurement support;
- Facilities Management advice.

#### 2.5.1.4 **Thomson Gray**

Thomson Gray has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services:

- Cost Advisory services (excluding Facilities Management);
- Whole Life Costing.

#### 2.5.1.5 Turner & Townsend

Turner & Townsend has been appointed as a sub-consultant to Mott MacDonald Limited and will deliver the following services: Construction Design Management and Health and Safety advice.

The role of CDM Co-ordinator is to provide the client with a key project adviser in respect of construction health and safety risk management matters. The CDMC should: assist and advise the client on appointment of the NPD contractor and the adequacy of management arrangements; ensure proper co-ordination of the health and safety aspects of the design process; facilitate good communication and co-operation between project team members; and co-ordinate health and safety information for issue to the NPD contractor.

#### 2.5.1.6 Financial Advisers - Ernst & Young

The Financial Adviser is engaged to provide financial advice to NHSL in preparing the FBC, including affordability and value-formoney analysis, and throughout the NPD procurement process, preparing financial elements of bid documentation and financial appraisal of bids.

#### 2.5.1.7 Legal Advisers - MacRoberts LLP

The Legal Adviser is engaged to provide Legal Services to NHSL in connection with the RHSC + DCN - Little France Project, including in relation to the procurement stage of the Project, post-contract award and operational issues as well as site and project-specific issues.

#### 2.5.2 **Project Stakeholders**

The project is influenced by two branches of stakeholder groups:

- 1) Internal Clinical and management groups -
- Estates & Facilities Management;
- Clinical Task Group. Refer to the table below outlining these groups;
- Other regional NHS Boards (including South East Scotland and Tayside Regional Planning Board).
- External parties with specific project interest -2)
- Scottish Futures Trust;
- Scottish Government;
- City of Edinburgh Council;
- Architecture & Design Scotland.

Task Sub Groups		
Co-joined Theatres	RHSC – Medical Inpatients + Day Case Unit	
Co-joined Radiology	RHSC – Inpatients – Medical & Surgical Shared	
Shared Health Records	RHSC – Neuroscience Inpatients	
Joined Neurophysiology	RHSC – Haematology / Oncology	
Clinical Management Suite	RHSC – Classrooms	
Main Entrance	RHSC – Critical Care	
On-Call	CAMHS	
Basement people – Domestic/ Staff changing, Materials Management, Bed Store, Estates	RHSC – Clinical Education and Child, Life & Health	
Kitchen	RHSC – Clinical Research Facility	
RHSC – Emergency Department / Radiology / PARU Shared	RHSC – Family Support	
RHSC – Emergency Care and Adult Link	Spiritual Care & Bereavement	
RHSC – PARU	DCN – Acute Care	
RHSC – Surgical Inpatients	DCN - OPD	
RHSC – Therapies and Special Feeds Unit	DCN – Programmed Investigations and Inpatients	
RHSC – OPD – Group 1	DCN – Therapies	
RHSC – OPD – Group 2		

#### 2.6 Work-streams

To assist with management of the different elements of the project, the project has been split up into the following work-streams:

- Facilities Management;
- Design & Construction;
- Construct Design Management Co-ordination;
- Commercial, incorporating Procurement Co-ordination and Commercial Services;
- Equipment;
- Full Business Case;
- Enabling Works.

There is also the Project Management Executive, providing a managerial function across all work-streams, and Clinical Support (see below).

The objective of work-streams is to empower individual work-stream leads and their delivery teams to manage themselves in the most appropriate way, rather than taking a 'one size fits all' approach to these very different project disciplines.

Work-stream over-views and functions are summarised below.

## Project Management Executive (PME)

The PME comprises the Project Director, the Commission Director and Lead Project Manager. This group will meet fortnightly to manage the overall project and includes Michael Pryor as Finance Lead and Andrew Orr as Legal Lead.

Although not a work-stream in itself, the PME will liaise with all the work-streams to monitor progress and ensure the project is proceeding appropriately. The Project Director will act as the filter for all Technical Advisor queries to the NHSL Project Team.

DL has introduced an Action Schedule for the PME meeting. The purpose of this is to ensure that all key actions are managed and tracked through to completion. It adopts a proactive approach to the management of activities, and provides a useful aide memoire to the project team.

## **Procurement Co-ordination**

The purpose of the Procurement Co-ordination work-stream is to develop and agree the procurement elements of the projects, including the procurement strategy and associated procurement documentation. In addition, the work-stream will guide the other technical sub-groups in the development of their deliverables in a manner which is consistent with the agreed procurement process.

The key deliverables and tasks for this work-stream are as follows:

- Development of procurement documentation;
- Management of procurement process up to Financial Close;
- Coordination of the technical inputs to the Project Agreement;

# Co-ordination / liaison issues may include:

- Liaison with legal and financial sub-groups for their input into the agreed procurement process and specific procurement issues;
- Liaison with Design and Construction, Facilities Management, Cost Consultancy work-streams to ensure their progress is consistent with the agreed procurement strategy and approach to key procurement issues;
- Liaison with the Project Management Executive to agree the management of the process.

#### 2.6.3 Design & Construct

The team will assist in the evaluation of the PQQ responses submitted by potential Bidders. Thereafter input will be provided as required during the CD process culminating in evaluation of the technical aspects of the tenders submitted. The team will advice on issues surrounding the appointment of the Preferred Bidder. During the lead up to FC, assistance will be given in the review of the Preferred Bidders proposals. This will include the review of Reviewable Design Data (RDD).

Key Responsibilities and Duties include:

- Technical advice on all D&C aspects of the project;
- Technical input to the Bidder selection process;

- Responding to Bidders technical clarifications;
- Technical input to the Competitive Dialogue process including attending Dialogue Meetings;
- Evaluation of Bidders D&C proposals;
- Review of the Preferred Bidder / Project Co proposals.

# Co-ordination/ liaison issues may include:

- Work in conjunction with NHSL during the evaluation of potential bidders PQQ submissions;
- Work in conjunction with NHSL and the other work-streams during the Competitive Dialogue process including responding to clarifications required;
- Work with the Preferred Bidder / Project Co to review proposals;
- The D&C work-stream will communicate with NHSL through NHSL D&C Team Member. The work-stream lead will communicate on a regular basis with the other work-stream leafs to co-ordinate and maintain consistency across the project.

#### 2.6.4 **Facilities Management**

During the NPD procurement process and until Financial Close, the FM work-stream shall work with the Board to refine FM Service Level Specifications (SLS), tender documentation, payment mechanism and interface agreements, which shall ensure the new facility is effectively and efficiently maintained.

# Key Responsibilities and Duties include:

- Providing input into competitive dialogue process;
- Evaluation of FM tender technical and commercial responses;
- Advising on FM costs and benchmarking.

# Co-ordination / liaison issues may include:

- Management of FM dialogue meetings with bidders during competitive dialogue meetings;
- Issuing and responding to FM clarifications during the tender period;
- Issuing FM clarifications during the evaluation process.

#### 2.6.5 Construct Design Management Co-ordination

The purpose of the Construct Design Management (CDM) Co-ordination work-stream is to undertake the role of CDM Coordinator (CDMC), under the Construction (Design and Management) Regulations, during the NPD procurement process up until the Preferred Bidder is appointed.

# Key responsibilities & duties include:

- Reviewing health and safety requirements of any construction contracts;
- Development of requirements within the ITPD documentation to address the Construction (Design and Management) Regulations;
- Evaluation of the NPD organisations' responses during the ITPD and tender e.g. competence requirements and approach to design hazard removal / mitigation;
- Review of strategies and residual risk information produced during the period up to FC.

# Co-ordination / liaison issues may include:

- Liaison and interface with design team members;
- Attendance at design development meetings;
- Liaison with NHSL teams in respect of Employer duties, obligations and responsibilities in relation to health and safety and statutory obligations.

#### 2.6.6 **Commercial Services**

The following specialist services and sub-streams will be required to support the project under the banner 'Commercial', along with the Procurement Co-ordination work-stream (see 2.6.3).

#### 2.6.6.1 Cost Consultancy

The purpose of the Cost Consultancy sub-stream is to assist and advise the Board in respect of RHSC and DCN capital value, life-cycle costing and change control processes during the development of the reference design and during the NPD procurement process up until FC.

# Key responsibilities & duties include:

- Advising in respect of FM costs;
- Cost Consultancy advice in respect of overall 'site wide' affordability issues e.g. clinical and external enabling works;
- Input into business case preparation;
- Input into pre-qualification issues and selection;
- Participation in Competitive Dialogue as appropriate;
- Input into project Financial Close;
- Advising NHSL Finance on project cash-flow forecasts.

# Co-ordination / liaison issues may include:

- Continual liaison with design team members;
- Attendance at design development meetings;
- Liaison with NHSL teams in respect of clinical enabling works and procurement of same (also potential liaison with PFI provider);
- Liaison with NHSL teams in respect of external enabling works and procurement of same (also potential liaison with PFI provider);
- Liaison with NHSL Finance regarding cash-flow forecast requirements and reporting.

# 2.6.6.2

The Board will be supported by externally-appointed Ernst & Young to provide financial advisory services for the procurement phase of the project. The purpose of the Financial Adviser function is to provide financial advice to NHSL with regards to the procurement stage of the RHSC + DCN - Little France project.

# Key responsibilities & duties include:

- Focussing on value-for-money and affordability;
- Pre-qualification;
- Preparation of financial elements of procurement documentation;
- Financial evaluation strategy;
- Evaluation of financial elements of submissions;
- Risk approach / strategy;
- Dialogue and negotiation support;
- Financial elements of approval processes;
- Financial close:
- Post-contract support and support in relation to negotiations with Consort.

# Co-ordination / liaison issues may include:

- Working with other disciplines to agree overall procurement strategy and evaluation strategy;
- Working within agreed formats and structures for deliverables so they fit within overall project process;
- Agreement of roles in relation to payment mechanism drafting and calibration (which will involve liaison with the technical team preparing the performance framework and the legal team preparing Project Agreement);
- Liaison with legal team on areas of Project Agreement requiring financial input;
- Liaison with NHSL finance team on issues of affordability and approval process requirements;
- The procurement project team will need to include the commercial and technical elements of the overall organogram, with NHSL and advisory staff forming the team. Team meetings will be geared to ensure good communication and understanding of respective roles.

#### 2.6.6.3 Legal

The Board will be supported by MacRoberts LLP who has been appointed to provide legal advisory services for the procurement phase of the project. The purpose of the legal adviser function is to assist and advise the Board in respect of their legal obligations and entitlements, procurement advisory services and commercial deal structuring.

#### 2.6.7 Equipment

A dedicated equipment work-stream has been identified to be responsible for determining the facility-wide equipment requirements. This group will be tasked with confirming the users' ultimate equipment requirements for inclusion within the procurement model. This role will also consider the replacement and transfer strategies in place within the RHSC and DCN facilities in the term leading up to facility hand-over.

The equipment work-stream is formed of NHSL staff: the main team consists of Graham Gillies, work-stream lead, and project team member Neil McLennan. Douglas Coull and Mike Conroy will be providing support as needed.

Other NHSL contacts who are providing professional support are as follows:

- Stewart Leitch Anaesthetic Technical Services Manager;
- Steve Kesterton General Medical Physics Equipment Manager, RIE;
- Dave Dewar General Medical Physics Equipment Manager, WGH;
- Caoimhe McIntyre X-Ray;
- Nick Weir Magnetic Resonance Imaging and Computer Tomography Scanning;
- Steve Pye Ultrasound Scanning.

# Key responsibilities & duties include:

- Preparation of the equipment sections of the ITPD documents and Project Agreement
- Maintenance/agreement of the Equipment List and Equipment Responsibility Matrix;
- Attendance at equipment sessions throughout Competitive Dialogue
- Review and evaluation of Bidders equipping proposals (mainly Group 1) including final agreement
- Procurement (including specification, funding and programming of delivery) of Board equipment; and
- Provision /installation of Board equipment into final facility.

# Co-ordination / liaison issues may include:

- Interface with D&C work-stream to ensure aligned requirements and outputs;
- Liaison with NHSL teams in respect of briefing requirements; and
- Co-ordination with procurement work-stream in relation to procurement compliance.

#### 2.6.8 **Business Case**

The purpose of this work-stream is to deliver the Full Business Case in accordance with key milestones.

This Work-stream comprises: NHSL Project Director, Associate Director of Finance, Capital Planning Project Manager and EY Financial Adviser; the NHSL Service Planning Project Manager and the Technical Advisers contribute as required.

Outputs from the following work-streams and groups are required to develop the full business case:

- Core Evaluation team;
- Design & Construct;
- Equipment;
- Commercial / Procurement Co-ordination;
- Facilities management;
- NHSL Finance and financial advisers.

# Clinical Support

To ensure the clinical needs and interests of the project are fully incorporated, NHSL engages clinical and operational staff, through the NHSL Project Team, to inform and review the Design. The NHSL Clinical Project Team is responsible for ensuring that design and planning reflect clinical operational need and best practice. They must ensure that an efficient, practical, functional facility is achieved through both the bidding design phases. The clinical team also represents the interests of the clinical user-groups in the D&C, FM and Equipment work-streams, and provides an advisory service to the other elements of the project as necessary.

# Key responsibilities & duties include:

Reviewing and analysing design drawings, providing feedback to the Design Teams/Technical Advisors during the procurement phase;

- Leading on the review of the clinical operational briefs;
- Leading on the review of the clinical output specifications;
- Reviewing of clinical pathways and flows to ensure SMART (Specific, Measurable, Attainable, Relevant, and Timebound) working is incorporated;
- Lead the RHSC and DCN Clinical Management Team (CMT), Radiology CMT, Theatre CMT and Facilities Management on workforce planning;
- Lead the annual review of the RHSC and DCN inpatient and outpatient clinical models of car and the Radiology and Theatres clinical modelling;
- Providing support in associated clinical enabling works in the RIE including Emergency Department, Critical Care, Renal and Transplant Services, Pharmacy, Laboratories, and Medical Photography. Providing support in associated work on the WGH site (Critical Care and Radiology) to ensure services remaining needs are met

# Co-ordination/ liaison issues may include:

- Interface with the FM, Equipment, D&C and Business Case work-streams.
- Interface with CMTs (RHSC & DCN, Radiology, Theatres, Critical Care, Laboratories, CAMHS, Emergency Department ), leads and deputies of Clinical Services, and Healthcare Planners to set specifications and instruct work (through the TA's Project Manager);
- Liaison with TA's members as needed, Workforce Planning Task Group and Bed Modelling Task Group.

# 2.6.10 Work-Steam Co-ordination Arrangements

Work-stream co-ordination is managed through the Project Management Executive team and lines of communication are outlined in the section 2.4 "Project Organisational Structure" and section 4.0 "Project Communications".

# 3. The Procurement Phase

#### 3.1 The Procurement Process

A bidder's day will be held on [date to be inserted once confirmed] which Candidates are invited to attend so as to meet the Board and the project team and learn more about this exciting opportunity. Copies of the reference design will be made available on the day and may be requested by any Candidate unable to attend the bidder day.

This Project is regulated and governed by the Public Contracts (Scotland) Regulations 2006 and any contract awarded shall be to the Candidate who can offer the most economically advantageous tender in accordance with the competitive dialogue procedure. The procurement process will also be conducted in accordance with guidance published by the Scottish Government Health and Social Care directorates and Office of Government Commerce guidance and use the NPD standard form contract, version 1 issued June 2011, with the payment mechanism and output specifications amended to take account of project and NHS specific issues.

This section describes in summary how the Board intends to procure the solution that satisfies the Board's requirements and is the most economically advantageous tender.

#### Pre-qualification 3.1.1

Section 6 of the Information Memorandum (IM) sets out the completion and submission requirements of PQQ responses; section 7 sets out the conditions for participation; section 8 sets out the methodology to be used by the Board relative to the prequalification and selection process. The pre-qualification questionnaire is included in Annex 1 of the IM.

The Board intends to shortlist 3 Candidates who will be taken through the competitive dialogue stage.

#### 3.1.2 Shortlist

The three short listed Candidates successfully pre-qualifying will receive the Invitation to Participate in Dialogue (ITPD) which will confirm the award criteria and the arrangements for the next stage of the procurement process.

Drafts of all relevant contracts (including the NPD Project Agreement) will be made available in the ITPD.

The ITPD shall set out the information for short listing Candidates to prepare during the competitive dialogue process, at final stage and at preferred bidder stage up to and including financial close.

#### 3.1.3 Competitive Dialogue

# 3.1.3.1 Dialogue stage1

It is proposed that there are three main stages to the competitive dialogue process. The initial stage will involve dialogue on the strategic direction of the Project and development of Candidate's proposals, including Technical, Financial and Legal proposals.

It is proposed that a review at the end of this stage is an informal process rather than a full submission. Short listed Candidates will be asked to give a presentation on their outline proposals and work to date. This will be an opportunity for short listed Candidates and the procurement team to present initial proposals to the Board representatives who have not been fully involved in the procurement process, but are still significant stakeholders in the Project

Short listed Candidates will be given guidance on the presentation structure and requirements and will be asked to let stakeholders see the presentation in advance to familiarise themselves and frame questions. The presentations will not be formally scored, but comments from stakeholders will be captured and fed back to short listed Candidates with salient points informing stage 2 of the dialogue process.

# 3.1.3.2 Dialogue stage 2

It is proposed that the second phase of competitive dialogue will look at more detailed technical, financial and legal proposals. The second phase will conclude with an invitation to submit detailed solutions. This will require a more formal submission, focussing on key issues including affordability.

Feedback will be given to each short listed Candidate and will inform the basis for the remaining dialogue prior to submission of the draft final bid.

In both stage 1 and stage 2 reviews, short listed Candidates will be expected to demonstrate innovation and explain how they intend to address issues around construction and provision of services.

# 3.1.3.3 Dialogue stage 3 and draft final tender

It is proposed that after the stage 2 review a further round of dialogue and clarification will take place before short listed Candidates are asked to submit a draft final tender.

It is proposed that at this stage, short listed Candidates will be asked to submit their final proposals in draft form based on an agreed contractual position. Draft bids will be reviewed for compliance and to ensure they are presented correctly to allow full evaluation to take place at the final tender stage.

Only limited dialogue is anticipated after submission of draft tenders. This will allow the Board to engage with each short listed Candidate to clarify, specify or fine tune their tender.

Dialogue will formally close when the Board is comfortable that one or more solutions are capable of meeting its needs. An Invitation to Submit Final Tender (ISFT) will be issued at this stage. Full details of ISFT requirements will be included in the ITPD.

#### 3.1.4 **Final Tenders**

When the Competitive Dialogue period concludes, short listed Candidates will formally be invited to submit final tenders via ISFT.

Details of scoring criteria and weightings that will be used by the Board during the evaluation of bid proposals will be described in the ITPD.

#### Selection of Preferred Bidder 315

Following receipt of final bids, some further discussions will take place with short listed Candidates to clarify their final bid. The Board shall then undertake a detailed evaluation of final bids based on the evaluation criteria specified in the ITPD. Following the detailed evaluation of the final bids, a final evaluation report will be prepared to recommend the preferred bidder. This recommendation will be based on the bid that represents the most economically advantageous tender. A standstill period will apply at the point at which the preferred bidder is selected and announced.

#### 3.1.6 **Financial Close**

It is envisaged that the Board and the preferred bidder shall then proceed towards a position where the project agreement can be entered into and signed. At this time the preferred bidder shall not be entitled to make material changed to any aspect of its final bid. During this period the preferred bidder will apply and obtain detailed planning approval of the detailed components of the Project, through applications for approval of matters specified in the conditions attached to the planning permission in principle.

In parallel, activity will take place to complete the full business case for the Project and gain all necessary approvals to allow financial close to take place.

It is proposed that a further standstill period shall take place between the date the Board notifies those parties who submitted a tender and the date on which the Board proposes to enter into and conclude the final contract with the preferred bidder, if the Board considers a further standstill period to be required or appropriate.

# 4. Project Meeting Strategy

# 4.1 Meeting Structure

The meeting structure covers various project work-streams and functions. These are summarised by the structure below, covering governance and project function:

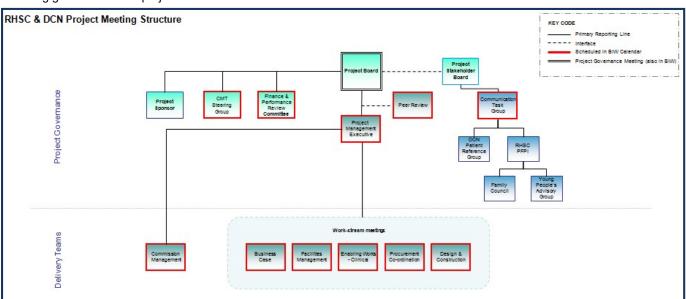


Figure 5: Project Meeting Structure

# 4.2 Meeting Terms of Reference

The meeting terms of reference, including abbreviations and meeting frequency, are illustrated below:



Figure 6: Meeting Terms of Reference

#### **Meeting Matrix** 4.3

The Meeting Matrix for the project is available on BIW. The purpose of the matrix is to identify and communicate the roles undertaken at each meeting and the distribution of information associated with the meeting. The matrix records the following by way of a letter coding system:

- The Meeting Chair (C);
- The Meeting Organiser (O);
- The Attendees (A);
- Distribution Group (circulation of all information associated with each meeting) (D).

The Meeting Matrix v4 is contained in Appendix E.

#### 4.4 The Meeting Schedule

The meeting schedule for the project is stored within the BIW Project Calendar.

# Why use BIW Project Calendar?

- BIW provides useful functionality that can store a high number of meetings in one shared calendar view. It can therefore provide visibility of all project meetings to its users - this ensures that everyone receives the same/consistent information;
- It is a "live" system, thereby providing 'real time' information directly to each user;
- It is a live electronic meeting schedule which avoids continual distribution of document revisions.

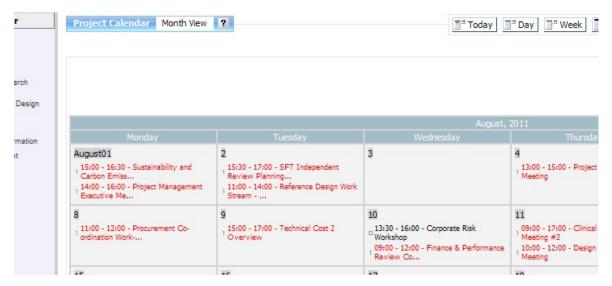


Figure 7: Example BIW Calendar

# How does it work?

- It is similar to Outlook, involving 'adding a meeting' and completing the basic fields with information;
- Any user can input their team meetings or other ad hoc meetings;
- Meetings that individuals are required to attend are highlighted by a colour key.

# What about Outlook?

- BIW Project Calendar will be used in parallel with Outlook. One does not replace the other for various reasons, but primarily because not everyone involved in the project is a BIW user;
- Outlook will continue to be the primary management tool for scheduling meetings in diaries. BIW Project Calendar is being used as a meeting communication tool for everyone involved in the Project;
- Note: Each meeting organiser will have their own approach to managing the entry of meetings into the attendee's diaries in Outlook or other (e.g. email with information, a meeting invite, verbal etc).

What meetings are included within the Project Calendar?

- The core, regular meetings are to be scheduled in the BIW Project Calendar;
- Any other ad hoc meetings should also be noted within the Project Calendar by the meeting organiser.

Who are responsible for the Project Calendar?

- The Project Co-ordinator (Rebekah Wendes, DL) will take responsibility for maintaining the information within the BIW Project Calendar for regular project meetings and ad hoc meetings that are identified as relevant project-wide;
- All organisers of meetings are to add the Project Co-ordinator as an 'optional' attendee to ensure up-to-date information is communicated through Outlook Invitations, and include where updates are distributed by e-mail (NB the Project Co-ordinator will not attend these meetings, this is just for information purposes);
- Each of the work-stream leads is responsible for inputting any ad hoc meetings specific to his / her own work-stream;
- Individuals are responsible for inputting and maintaining meeting information they choose to upload to the calendar.

#### 4.5 **Meeting Protocols**

All meeting invitations should be formally issued via Outlook (or other diary system) where possible. This ensures that all attendees are updated with diary information simultaneously and avoids unnecessary duplication of effort.

Work-stream leads are responsible for chairing, recording and general co-ordination of work-stream meetings.

The agenda and minutes or action notes of the meeting are to be prepared and issued by the party responsible for chairing the meeting or a designated note taker.

Distribution of the meeting outputs for each meeting shall be recorded on the minutes or meeting note.

Agendas and meeting papers should be circulated at least 3 working days prior to the meeting.

The minutes should be issued to the distribution list within 96 hours of the meeting.

All parties attending meetings are responsible for noting their individual actions and progressing actions arising and should not rely upon the issue of minutes for progressing project matters.

All parties attending meetings are responsible for printing their own copy of meeting papers.

Each consultant will retain responsibility for convening meetings with appropriate third-parties to permit development as the project proceeds, and to produce and circulate a formal minute or summary note of this meeting. If organising a meeting / workshop with NHSL a meeting schedule should be filled out and sent to the Project Co-ordinator, Rebekah Wendes, who will liaise with the NHS Lothian Project Administrator, Lauren Lynch, to organise. Rebekah Wendes will then issue invites to Technical Adviser attendees and Lauren Lynch to NHS Lothian attendees. A copy of the meeting schedule template can be found in Appendix D.

Individuals are responsible for sending their formal apologies for non-attendance at a meeting. This should be done as far as possible in advance of the meeting. Notice should be given to the Meeting Chair and / or Meeting Organiser.

# 5. Project Communication

# **Lines of Communication**

The general lines of communication for the project are illustrated on 'Figure 4: Communication and Contractual Links Structure' in section 2.4 of this document.

Formally, the lines of communication for the project shall be as follows:

- Communication lines both formally and informally are to be in accordance with the Project Organogram in Section 2.4 of this PEP. All contractual lines are shown by the solid lines and all communication routes are shown by dashed lines;
- All formal communication between the Board and the technical advisors which constitutes any variation or amendment to the main contract will be formalised between the Board Project Director and the Commission Manager from Mott MacDonald. The Board's representatives within each of the work-streams will be responsible for requesting proposed changes to the Project Director and these will be formalised in accordance with the change control pro forma contained in Appendix C. Each of the work-stream leads will be responsible for notifying the Project Management Executive team of the changes requested;
- All work-stream leads will provide regular updates to the Project Manager (Davis Langdon). A formal progress report will be prepared by the work-stream leads on a monthly basis and issued one week prior to the monthly meeting;
- The Lead Project Manager will be the first point of contact for the Project Director on all day-to-day issues. The lead Project Manager will meet regularly and keep the Commissioning Manager fully briefed to ensure he is fully aware of all
- In general terms the work-streams will communicate and function internally to their groups. Where cross work-stream communication and interface is necessary this will be facilitated via the leads of the work-streams. If required, coordination meetings will be arranged to address matters. Matters arising from the work-streams which need to be addressed by third parties or other NHSL consultees will be co-ordinated by the NHSL representative of that workstream:
- The Lead Project Manager will be included in circulation lists for all project related correspondence where relevant. In order to ensure effective communication with parties involved, or affected by the Works associated with the project, a joint communications protocol will be developed for engaging and managing stakeholders;
- The Project Director will communicate with the Commission Director on all contractual matters and raise any concerns in relation to project matters;
- DL will require all formal changes to be instructed by the Commission Manager.

All communications are to be as clear and concise as possible and all parties are encouraged to verbally discuss issues. The use of e-mail correspondence / communication is to be encouraged; however, any documents relating to specific contract issues / mechanisms or legal documents, financial certificates, or where signed and witnessed signatories are required, hardcopies must be provided.

During the Project there will be a deliverables approval process in operation. This is to ensure continuity through all the work streams and that all final deliverables have been thoroughly checked and approved before they are issued. The approval process is outlined in the diagram below:

# RHSC + DCN Little France - Project Deliverables Approval Process

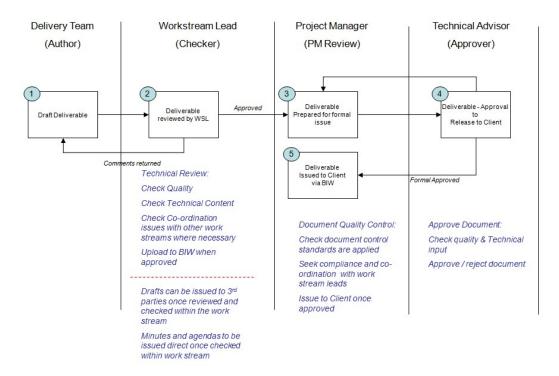


Figure 8: Project Deliverables Approval Process

# 5.3 Project Contact Directory

A Project Contact Directory will be made available on BIW and is designed to be accessible to all parties to find the relevant persons to contact where necessary. The document is maintained by DL. Any updates required to the directory should be directed to Rebekah Wendes (DL).



Figure 9: Project Contact Directory Example Pages

#### 5.4 **BIW Project Collaboration Tool & Document Control**

- The project utilises BIW as a channel for communication and storage of project documents and for all contract 5.4.1 administration. BIW is the management tool for the following procedures/protocols:
- Design Management and storage;
- Risk Register;
- Data Room;
- Collation of Board policies and reference documents;
- Procurement and Contract documents.

It is planned that following Stage 1 (reference design and procurement set-up phases) BIW will be used for live data a tendering facility for bidding consortia in the Competitive Dialogue process.

# BIW Administration Roles & Responsibilities:

Each project has users carrying out the following admin roles:

- Project Information Coordinator (PIC) The PICs are responsible for requesting new companies and adding new users to the project and amending user rights accordingly. Any changes to the configuration of BIW must be authorised by a PIC. On this Project the PIC is Amy Kam of DL;
- Company Administrator (CA) At least one user per company should be nominated to be the CA for that company. This person can create new users for their company and edit existing user details and the rights of their company users. This is normally the user who attends the initial BIW training. This user will also be able to train other users within their own companies in the basic areas of the system. Company Administrators are as per the table below:

COMPANY	ADMINISTRATORS
NHS Lothian	Lauren Lynch / Philip Assou-Dodji
Davis Langdon	Amy Kam
Mott MacDonald	David Stillie
Montagu Evans	Fraser Littlejohn
Thomson Gray	Rod Shaw

# **BIW Technical Assistance**

System Administration & Helpdesk can provide information and assistance in regards to gueries about the channel. Email: helpline@biwtech.com or Tel: +44 (0) 845 1300 999.

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System Help Guides – Help guides are available throughout the various screens in the channel. Clicking on 🚺 in any screen will take you to the relevant help guides for that particular section.

#### Use of BIW 5.4.4

The use of BIW is considered imperative for such means and all required parties are to obtain log-in details and publish documentation / drawings under the appropriate folders and as per the guidance outlined in the BIW Project Collaboration Tool Protocols Document available within BIW. It is expected that BIW should be utilised on a daily basic by the key members of the project team.

# **Change Control Procedure**

NHSL, Mott MacDonald Limited and their sub-consultants will follow the change control procedures in accordance with the Head Contract Agreement. In addition all parties will adopt the following protocols:

Each sub-consultant will submit change requests to Mott MacDonald Limited if additional services or variations to their agreed scope of service are introduced. The following process should be followed dependent on the nature of the change:

Variation instructions notified by the sub-consultant to Mott MacDonald Limited:

- Step 1 The sub-consultant will raise a Change Control Form, outlining anticipated financial change, programme implications and consequences of the change
- Step 2 Mott MacDonald Limited will consider the implications of this change and submit a Change Control Order to NHSL for approval using the Change Control document contained in appendix C
- Step 3 Mott MacDonald Limited will return to the sub-consultant a signed off copy of their Change Control Form.

Variation instructions notified by Mott MacDonald Limited to the sub-consultant:

- Step 1 Mott MacDonald Limited will notify each sub-consultant when they require a change to the agreed scope of service and will instruct the sub-consultant to complete a Change Control Form. Mott MacDonald will provide sufficient briefing information within their request in order that the sub-consultant can confirm anticipated financial change, programme implications and record any associated consequences.
- Step 2 Mott MacDonald Limited will consider the implications of this change and submit a Change Control Order to NHSL for approval using the Change Control document contained in Appendix C
- Step 3 Mott MacDonald Limited will return to the sub-consultant a signed off copy of their Change Control Request.

Mott MacDonald Limited will return comments on the proposed change order within five working days. Mott MacDonald will notify the sub-consultant to proceed and implement the change or reject the change within ten working days of transmittal. If no response is given within the ten working day period then the request for change will be deemed as approved. Change control requests will be submitted to Mott MacDonald from each sub-consultant via email. Each sub-consultant will retain a schedule of approved change orders.

All variation orders submitted by sub-consultants will be accompanied by a resource schedule. In the event that Mott MacDonald Limited instruct works to commence without cost and programme effects being agreed all costs reasonably incurred in relation to the variation will be recovered.

The Board's representatives within each of the work-streams will be responsible for notifying the Project Director of proposed changes. Each of the work-stream leads will be responsible for notifying the Executive Project Management team of the changes requested.

# **Stakeholders**

There are many stakeholders involved in a project of this nature and these are to be identified under four main headings for ease of reference, as follows:

- NHS Lothian, comprising Lothian Partnership Forum, Executive Management Team, RHSC Re-Provision Clinical design Groups, Facilities Management;
- Statutory Authorities and Public Utilities including the Health & Safety Executive. This also includes government agencies such as Scottish Futures Trust (SFT) and other bodies such a Architecture and Design Scotland (A&DS) who are a statutory consultee through the planning process;
- Funding comprising Lothian NHS Board and the Scottish Government, PFPI (Child 7 family Advisory Board), patients, service users and charities;
- Other Stakeholders comprising NHS National Education Services Scotland, other Heath Boards, core NHS Lothian sections & others.

It is important to establish for each stakeholder, the role they have, their influencing factor, the impact they will have and how each communicates and engages with the project as a whole. This information is currently under development.

The Stakeholder Map will be stored within BIW.

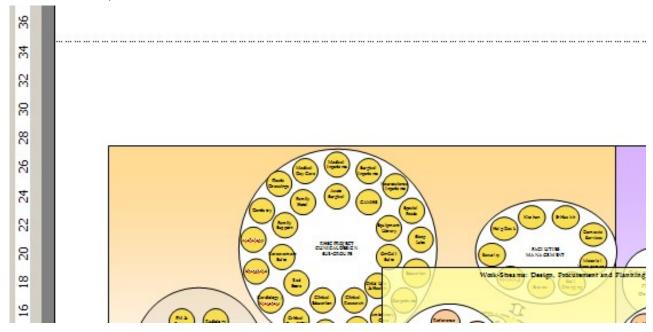


Figure 10: Example Stakeholder Map Diagrams

# 6. Programme, Progress & Reporting

# 6.1 Key Milestones

The key milestones of the project are detailed as follows:

Milestone:	Date:
OJEU	26/03/12
PQQ Receipt	26/04/12
Issue ITPD	13/07/12
Submit Outline Proposals	03/10/12
Submit Detailed Proposals	05/12/12
Submit Draft Bids	13/02/13
Submit Bids	16/05/13
Appoint Preferred Bidder	15/08/13
Financial Close	22/11/13
Construction Start	13/03/14
Construction Work Complete	14/10/16
Hospital Opens	28/11/16

DL will provide and update the programme monthly, tracking project development and identifying potential matters arising which may affect the identified milestones recorded above. In the event that changes to the programme are necessary, these will be considered as part of the Project Management Executive Meeting and approved for implementation by the NHSL Board.

# 6.2 Progress Monitoring and Reporting

The diagram below illustrates the Progress Reporting Structure for the project. A Work-stream Lead has been identified within each of the service lines and will provide a summary of progress made for inclusion in the monthly NHSL Project Board Report.

[Insert when agreed]

Figure 11: Project Reporting Structure

# Project Management & Technical Advisory Report | Davis Langdon

DL will provide a monthly Project Manager's Report for issue to the Project Commissioner. The purpose of the Project Manager's Report is to inform the Project Director fully on the progress of the project, in relation to programme, design, cost, procurement and construction; in particular to highlight any areas of concern and critical activities to be undertaken by the Client Team, Project Board and other members of the project team. The Project Manager's Report is a 'dashboard' style report which forms part of the Monthly Project Board Dashboard Report.

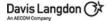
An example of the full NHSL Project Board Dashboard Report is shown at Appendix B.

The progress report will contain:

- Summary of the overall progress made within the reporting period;
- Update on the progress made by each work-stream;
- Programme summary and update;
- Identification of key issues;
- Summary of key risks and any changes in the risk profile.

# Progress Reporting Schedule

The progress reporting schedule for 2012 is shown below:





# Progress Reporting - schedule of dates to end of 2012

Report to be prepared by	Issue to Davis Langdon	Report type	Frequency	Date of meeting	Report by	Input by	Input to
Project Board Report CM, PM, TA and CDM	To: Rebekah Wendes cc: Fraser McQuarrie	Summary Report	monthly	08-Jun-12	01-Jun-12	30-May-12	Project Steering Board Meeting
Project Board Report CM, PM, TA and CDM	To: Rebekah Wendes cc: Fraser McQuarrie	Summary Report	monthly	13-Jul-12	06-Jul-12	04-Jul-12	Project Steering Board Meeting
Project Board Report CM, PM, TA and CDM	To: Rebekah Wendes cc: Fraser McQuarrie	Summary Report	monthly	10-Aug-12	03-Aug-12	01-Aug-12	Project Steering Board Meeting
Project Board Report CM, PM, TA and CDM	To: Rebekah Wendes cc: Fraser McQuarrie	Summary Report	monthly	14-Sep-12	07-Sep-12	05-Sep-12	Project Steering Board Meeting
Project Board Report CM, PM, TA and CDM	To: Rebekah Wendes cc: Fraser McQuarrie	Summary Report	monthly	12-Oct-12	05-Oct-12	03-Sep-12	Project Steering Board Meeting
Project Board Report CM, PM, TA and CDM	To: Rebekah Wendes cc: Fraser McQuarrie	Summary Report	monthly	09-Nov-12	02-Nov-12	31-Oct-12	Project Steering Board Meeting
Project Board Report CM, PM, TA and CDM	To: Rebekah Wendes cc: Fraser McQuarrie	Summary Report	monthly	14-Dec-12	07-Dec-12	05-Dec-12	Project Steering Board Meeting

Figure 12: Progress Reporting Schedule for 2012

#### 6.2.3 Reports & Documents

All documents prepared by the Project Management and Technical Advisory teams will be released containing the Mott MacDonald Limited and Davis Langdon, An AECOM Company logos. The document originator will use the agreed templates for all minutes, reports and letters. Changes to documents will be covered on the "Document Issue".

All documents should contain the following disclaimer statement:

"Commercial In Confidence - not disclosable under the Freedom of Information (Scotland) Act 2002"

# 7. Risk Management

# 7.1 Risk Management Approach

Risks will be identified and managed at the PME meeting. The risks identified are to be managed in pro-active manner in accordance with the mitigation strategy agreed for each risk identified. The risk register remains a live document which must be regularly reviewed and updated by all parties. Risk will be categorised and quantitatively scored in accordance with the probability and impact scoring matrix. Following identification and risk assessment each risk will be ranked to understand the key risks within the project, in order that these can be priority managed. Mitigation strategies will be developed for each of the key risks and will be assigned to individual Work-stream Leads for action. Risks will be reviewed and reported to DL on a monthly basis for inclusion within the updated register. Ernst & Young will be responsible for monitoring financial risk, and DL will monitor project risks.

Any new risk to the project should be raised at the PME.

# 7.2 Risk Register

The Risk Register will be stored within BIW for reference by all parties and an example is given below:

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Figure 13: Example Risk Register

# 8. Budget & Cost Management

#### 8.1 **Cost Reporting and Control**

Cost reporting will be undertaken through a comprehensive Financial Report issued by the Cost Advisers. This report will be issued monthly. A schedule of these dates is to be agreed between the Project Team and circulated by the Cost Advisers.

The content of such cost reporting is to include the following:

- Site Wide development cost update;
- Construction cost analysis;
- Reconciliation with client budget;
- Cash flow statements;
- Potential cost changes identified by the risk process;
- Potential cost changes identified by the change control process;
- FM cost statements;
- Life cycle cost statements

# 9. Health & Safety

#### 9.1 **Construction (Design and Management) Regulations**

During the period up until financial close the CDM client for the project will be NHS Lothian. After financial close the successful NPD organisation will be elected as CDM client and will be responsible for undertaking client duties for the construction period, which include the appointment of the CDM Co-ordinator and Principal Contractor.

The implementation of the CDM Regulations during the NPD procurement stage will comprise:

The development of requirements within the Invitation to Participate in Dialogue (ITPD) documentation that will enable the NPD tendering organisations to demonstrate that they have the necessary competence and understanding to undertake the CDM duty-holder responsibilities after the NPD organisation has been elected as CDM client.

This will be followed by a review of the submissions as part of the evaluation process:

- That the design being developed by the NPD tendering organisations is addressing the requirements of the CDM Regulations with regards to designer duties, such as that the process for design risk management is in place and being implemented;
- The design prepared between the appointment of the NPD organisation as preferred bidder and financial close, for health and safety issues;
- The "data room" (which will be on BIW) in which all relevant health & safety information will be located this will comprise the pre-construction information that will be transferred over to the NPD organisation;
- Addressing health and safety requirements in any survey or investigation works that are required as part of the project to inform the reference design or the NPD tendering organisations. This will include liaison with Consort and other third parties as appropriate to comply with their site rules and requirements for method statements.

# 10. Governance & Audit

# 10.1 OGC Gateway Reviews

The project will go through Key Stage Reviews (KSR) at certain pre-defined points during the procurement process (based on the competitive dialogue process). These reviews will be implemented at the following stages:

- In advance of OJEU Notice being released;
- Pre-release of Invitation to submit Final Tenders;
- Pre-NPD Co Appointment as Preferred Bidder;
- Pre-Financial Close.

The reviews are based initially on self-assessment, through completion of the KSR questionnaires (based on the Scottish Government standard questionnaire) by the project team.

It is still to be determined if the project will undertake a voluntary KSR at the pre-ITPD stage.

An overview of Scottish Government Health Directorate guidance follows, as a summary of KSR.

# Advance of OJEU Notice

This review should not be regarded as a pass/fail exercise. It is a tool to assist NHS bodies to pause and consider whether they are advanced sufficiently in their project development and have considered project deliverability rigorously in order to proceed to OJEU Notice issue, in order to launch their procurement:

- Section 1 Governance;
- Section 2 Scope;
- Section 3 Stakeholders;
- Section 4 Competition;
- Section 5 Procurement Risks;
- Section 6 Value-for-Money.

# 10.1.2 Pre-Invitation to submit Final Tenders

At this stage the Board will provide information outlining the proposed approach and methodology, including how they will approach the Competitive Dialogue phase:

- Section 1 Update & Affordability;
- Section 2 Value-for-Money;
- Section 3 Commercial Issues;
- Section 4 Deliverability;
- Section 5 Data Room and Background Information.

# Pre-Preferred Bidder Appointment

This review is required to check all actions have been undertaken to secure commitment from the prospective Preferred Bidder, its key contractors and funders. It is intended to clarify the parameters of the commercial negotiations and any outstanding commercial terms, provide transparency in terms of affordability testing, and establish status of risk profile in order to prevent reallocation of risk or adverse changes to the project risk profile:

- Section 1 Project Update;
- Section 2 Affordability / Value-for-Money;
- Section 3 Financial / Risk;
- Section 4 Commercial Position;
- Section 5 Technical:
- Section 6 Deliverability.

# 10.1.4 Pre-Financial Close

The intention of the Pre-Financial Close KSR will be to assist the Board in considering what needs to be put in place in terms of staffing and resources ahead of the construction and operational stages of the project.

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# B8 CLARITY, ROBUSTNESS AND QUALITY OF APPROACH TO CONSORTIA MANAGEMENT ARRANGEMENTS INCLUDING APPROACH TO SUB CONTRACTORS

B8.1 Submission requirement: Bidders must submit proposals setting out details of how its consortium will be managed, setting out the key roles and their responsibilities including technical roles within their consortium they have identified as key to the Project during contract finalisation, construction and operational stages and Project Co.'s role in leading the project management. This shall include team leaders for all principal disciplines, both before and after financial close, and may include but not be limited to the following:

- Project and programme management
- Risk management
- Design
- Works
- Services
- Quality, safety and environmental management including HAISCRIBE and BREEAM

B8.2 Submission requirement: Where any element of the Works and/or Services are to be provided by subcontractors other than the Contractor or Service Provider(s) Bidders must submit details of:

- The selection process undertaken for each sub contractors that are confirmed at the time of submitting the Final Tender, and/or the selection process (including timescales) that will be undertaken for those subcontractors yet to be confirmed
- The manner in which performance of the sub contractors will be secured and integrated within the overall performance requirements of the Board's output specifications

# B8.1 CONSORTIA MANAGEMENT ARRANGEMENTS

# **B8.1.1** Consortia Management

For ease of reference, IHS Lothian consists of the Macquarie Capital Group Limited, Brookfield Multiplex Construction Europe Limited and Bouygues Energies & and Services (BES). The activities of the Principle sub-contractors (the D&C Contractor and the Services and Life Cycle Facilities Management provider) will be managed by IHS Lothian through the appropriate appointment Contracts. IHS Lothian acting as the point of contact will interface with the Project Steering Board acting on behalf of the NHS Lothian Health Board. This structure is has been in place through the dialogue and tendering process and will remain so through all phases of the project until expiry of the concession period.

This section sets out our proposals for Consortia Management to ensure the successive phases for the Reprovision of the RHSC and DCN at Little France project. This arrangement has been in place since the start of the dialogue process. It will continue through Preferred Bidder Stage, on to Construction Commencement Date and throughout the construction and service delivery period leading to final Completion. Our management proposals will continue to be in place through to the end of the Service Period.

We have included details of our communication and management structure to demonstrate how we will manage the activities of the principle subcontractors and design team members. We will also ensure that the provision of Services post completion will be delivered to the same high standard. We have provided details of our integrated approach to the delivery of the project. The primary aim is to ensure minimal disruption to ongoing operations on and around the Little France campus.

Our strategy outlined in this section for the Project Management and Design Team Management has been developed based on our experience across a number of complex healthcare projects including Peterborough Hospital PFI, Glasgow Southern General Hospital. Furthermore, HCP who we introduced as part of our team provide significant experience in the day to day operational management of hospitals with over 21 PPP hospitals under their stewardship. We have the experience within the IHS Lothian staff in delivering construction and services project's who have a track record in these and similar environments. We consider this to be a key aspect of our proposal in providing you with the comfort you require in building a relationship with a trusted long term partner.

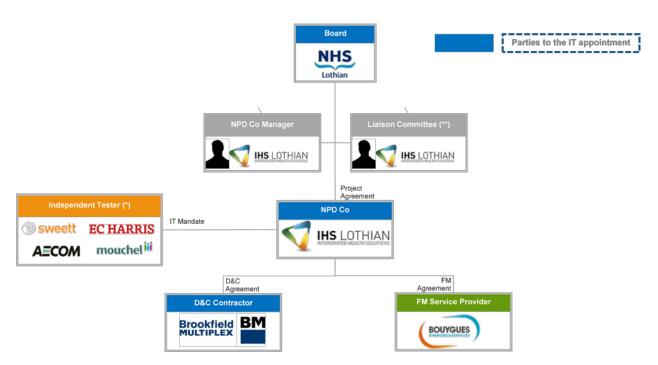
Our commitment to you is that we will apply our management systems and using our effective and experienced Project Management team. We will use proven systems to manage risk, health and safety, quality and environmental management, performance management, HAI-SCRIBE and BREEAM.

Further details of the professional team including CV's and organisation charts are included sections B9 and B11.

# Preferred bidder to commencement date

A rigorous team wide approach has been adopted in providing the financial, legal and technical design and construction solutions for the proposed re-provision of RHSC and DCN at Little France. This will continue throughout the preferred bidder phase through to Financial Close.

The organisation chart below shows the proposed structure we would adopt to cover such matters as project and programme management, risk management, design, construction, services, quality, and health and safety and environmental management including HAI-SCRIBE and BREEAM. Through the dialogue stage we have addressed these matters in part and whole and recognise there remains further work to be done.



Upon being selected as preferred, IHS Lothian will engage with NHS Lothian Board and their representatives to initially provide information as may be requested in the Preferred Bidder letter. We will continue to engage with the Board throughout the period to refine on the design and provide any necessary supporting technical clarifications. During this period such topics as described below will be progressed with the Board as follows:

**Funding competition:** IHS Lothian will conduct a funding competition with the selected banks in order to procure the most economical and advantageous market rates. We will insure that that Funders Technical, Insurance and Legal Advisers are thoroughly briefed on all developments within the project. We will keep the Board and its advisory team members fully informed of any potential legal and commercial matters that may arise through this process.

**Programming:** Section B15 contains the current programme and commentary for the period leading up to Financial Close. This programme to financial close will be further developed by us on appointment of Preferred Bidder letter taking into account any further requirements that evolve during this phase. This will be carried out in conjunction with the Board to ensure smooth running of the Funding competition and any other matters which require action during this phase. This will also ensure the legal and model audit work streams are managed through to a successful financial close.

**Planning:** We will carry out further consultation with the appropriate planning departments beyond the three Board managed meetings held to date. This engagement and design output from our team will continue to develop compliant planning drawings which will be submitted to the Board for review and approval.

**Design:** A Reviewable Design Data schedule will be drafted by us and reviewed and agreed in conjunction with the Board to allow necessary and appropriate input on various elements of the project. This will be as set out in schedule 8 of the Project Agreement. This will be supplemented with the setting up of a design data base and managed by us with regular updates and review with the Board.

An integral part of this process will have our key design consultants along with our FM design manager continue to develop the design solutions and address any issues that may arise as a result of Planning, Building Control, and fire safety compliance to finalise the design for the construction phase.

**Commissioning planning:** A detailed commissioning programme will be produced by us along with an inspection and handover criteria schedule of items that will be defined and agreed with the Board in line with the requirements set out in appendix A to schedule 10 of the Project Agreement.

**Procurement programming:** A procurement schedule and request for information schedule will be further developed by us. This will ensure that design production is in line with the Board's Construction Requirements to the next stage of delivery. This will ensure a smooth transition into the next phase, (Commencement Date to Actual Completion Date of the Construction activity), is achieved, allowing the construction works to progress in accordance with the agreed programme and methodology.

# Commencement date to actual completion date

The NPD Co. manager will be the key point of contact for the Board and will ensure the effective management of the activities of the D&C Contractor and the Services Contractor. In addition the NPD Co. manager will set up and chair reporting meetings with the Board on a Monthly frequency. It is envisaged that these meetings will take place on site at the co-located offices. During these meetings the NPD Co. manager will provide an updated report on progress and the performance of IHS Lothian along with the findings of the Independent tester and any actions arising. The NPD Co. manager will also maintain records and details of any proposed changes, all as set out in the Project Agreement. The NPD Co Manager will be supported by the Liaison Committee.

The on site management team will provide a co-ordinated approach to the delivery of the project and will monitor the performance of all stakeholders from the date of the letter of Preferred Bidder. They will continue this process through detailed management analysis and adherence to critical milestone dates set out in the design and construction programme. Having this management team in place on the project will benefit all parties in terms of controlled interface activity operations, procurement, reviewable design data, reporting, technical assistance, and the effective integration of 'Lessons Learnt'.

The management team will be lead by our Contractor's Project Director who will oversee the communications consultation and implementation plans as well as the mitigation of project risks.

This structure will ensure that:

- A coordinated approach is taken to all aspects of the project
- The Board have one point of contact in all matters relating to Design, Construction, Procurement, Safety and Health and Commissioning through HIS Lothian's NPD Co. Manager
- Project Activity governance is in place to effectively control all construction activities
- Detailed tracking and forward analysis of the Design, Procurement and Construction is undertaken to highlight any potential issues which may affect the execution of the works
- Procedures are in place to identify items of project risk and that mitigating measures are implemented at an early stage
- Common procedures are applied in relation to procurement of all design materials, and sub-contracts whilst taking into consideration the specific requirements of the works packages and site
- Thirty minute protocol for reporting safety and quality incidents will be implemented

IHS Lothian's philosophy to optimising the benefits of the contracting structure is to put in place a system whereby the Project Director will have full responsibility for the design and construction coordination of all elements of the construction process. The Project Director will be in place from the date of Notification of Preferred Bidder letter and will manage the design process from this date through the construction phase up to the date of the service commencement period. All communication relating to design and construction will be channelled through the Project Director who will interact with IHS Lothian's Management team on a daily basis on matters relating to Design, Construction, Health and Safety, Quality, Mechanical and Electrical, FF&E, and Programme. This will ensure that the project is delivered in line with the construction programme whilst maintaining a consistent overall approach to quality and method with appropriate interface and attendance at the Little France Campus Working Group meetings.

**Stakeholder meetings:** In conjunction with the Board and other Board Parties and stakeholders we will establish a meeting and reporting structure to ensure necessary governance of all IHS Lothian activities. Appropriate attendees will be identified from both the Board and IHS Lothian to chair and input to necessary meetings. These will be scheduled at the frequency required in order to effectively deal with project issues.

There will be on-going consultation with other 3rd parties such as Consort to mitigate and manage any issues that may arise during implementation of the works. In particular the works to be carried out in close proximity to the existing estate buildings and where direct access and service connections are necessary. These operations will be pre planned and detailed methods of work agreed prior to commencement of such operations together with appropriate interface through our attendance at the Little France Campus Working Group meetings. (refer to Section B4 for further details in this regard.)

**Design:** The reviewable design data schedule will be implemented following agreement with the Board as to its content. In addition, the BIM Model and the design database will be further populated and updated periodically to reflect current design status and documents in use. For further details on quality, verification and validation of design please refer to section B13.

**Construction planning:** IHS Lothian will ensure that the Construction Methodology for the project is developed and controlled through the detailed master programme, risk register and quality plan. These documents and underlying processes will outline the strategy and also provide the details of the sequence of quality of construction in line with the requirements of the Board and other campus stakeholders at Little France.

In the management of the construction process IHS Lothian will require that detailed consideration will be given to the overall sequence and methods of construction. This will be discussed in detail with our Contractor and as part of the process of approval to proceed with the Works agreed with all relevant parties prior to works taking place. Co-ordination meetings managed by IHS Lothian for the up and coming construction activities will be held weekly and correspondence will be exchanged as required. An open line of communication will be in place through IHS to the Board at all times.

Our contractor will provide specific method statements for all aspects of the construction work. These will be developed in conjunction with the specialist sub-contractors and no works shall commence unless these method statements have been agreed.

Construction stakeholder engagement: As part of the activity governance process and prior to commencement of the on-site construction works a series of meetings will be held with the Board and various on and off site stakeholders and third parties to ensure all necessary parties are aware of the scope of the activities. In addition IHS Lothian will ensure that the required risk controls will be put in place by our Contractor to ensure no nuisance to neighbours is experienced as a consequence of the construction works.

**Construction quality:** In the delivery of the construction works our Contractor's Quality Management System will be implemented and updated as required. As part of the project governance process in place IHS Lothian will carry out inspection and audit of systems and the Works to ensure Contract requirements are being achieved and operations appropriately controlled. The QMS will fully detail the methodology in implementing the works as well as setting out the various procedures relating to management, certification, auditing, commissioning and handover.

The Independent Tester will be accommodated in carrying out the works set out in the IT Schedule 13.

**Subcontractors:** Once financial close has been achieved the subcontractors for the various elements of the work that have not yet been formally procured will be engaged in accordance with our Contractor's procurement schedule. Where required, those subcontractors with design interface will have an input into further design development as may be necessary to optimise the individual elements relative to site conditions, programme and methodology. Certain subcontractors will develop shop/fabrication drawings in conjunction with the design teams which will be integrated as required into the reviewable design data (RDD) process for Board input and approval as required.

**IHS Lothian project management functions:** IHS Lothian will put in place controls and measures through our Contractor to ensure deliverability and quality of the construction process. These will include the following procedures set in place during the works:

- Fortnightly design team meetings
- Weekly subcontractor/construction team meetings
- Regular quality, health, safety environmental inspections to pre set frequencies
- Our Contractor has a management structure in place that will monitor all aspects of the subcontractors' activities. Aspects reviewed will include drawing production, works installation, testing, commissioning, and providing as-built drawings and certification
- IHS Lothian's site management team in conjunction with our Contractor will continue to utilise the information co-ordination procedure (Aconex) to monitor and formalise communications exchange and control of data
- The construction programme from our Contractor will recognise fully the Board's and overall project critical milestone dates. IHS Lothian's management team will ensure that such dates are fully complied with
- Commissioning and Handover of the works will be rigorously controlled and the Board's team and Independent Tester will be integrated into the process of demonstration and proving of systems and products as required. This will also extend to cover training of the Board FM staff as well as those of the Service's provider

# Actual completion date to end of project term

**Continuity:** The NPD Co. manager will remain the key point of contact for the NHS Lothian Board following successful handover from our Contractor at practical completion of the works. The NPD Co. Manager will maintain a management role with the Services Contractor. Reporting meetings will continue and direct contact with the Board's representatives will be maintained and developed through the evolution of the project.

**Service provider:** Our Services provider, following handover from our Contractor and Independent Tester sign off, will commence the operations phase of the concession. A help desk facility dedicated to the support and delivery of the Facilities Management and Lifecycle Management services will be operated to attend to the Board's requirements in fulfilling their obligations and vision.

**Help desk:** The help desk will act as the central hub for communication regarding all services, using a dedicated system for the scheduling, recording, progress monitoring and reporting of all activities, and proving the access point to 24 hour emergency support services. The help desk will manage and coordinate both day to day service delivery as well as long term co-ordination of the life cycle plan.

Our Services provider will deliver an industry standard Computer Aided Facilities Management (CAFM) system as the platform for all services delivered by the help desk. The CAFM system will provide the database to support the two key functions of the help desk. The recording, progress tracking, quality monitoring and reporting of reactive and requested works will operate alongside, and where appropriate, integrate with the scheduling and recording of all planned service activities in support of the long term life cycle management.

Through IHS Lothian the help desk function will aid the provision to the Board of regular data on the progress and quality of services, both scheduled and reactive, by use of suitably designed reports and remote access to the CAFM systems where appropriate. The content of these reports will be regularly reviewed by IHS Lothian in conjunction with the Board to ensure that the level of Service is maintained at the required level. Should any adjustments be required these will be incorporated into the Services delivery as necessary.

# B8.1.1.1 Details of how the consortia will be managed

IHS Lothian consists of the Macquarie Capital Group Limited, Brookfield Multiplex Construction Europe and BES. The activities of the Principle sub-contractors (the D&C Contractor and the Services and Life Cycle Facilities Management provider) will be managed by IHS Lothian through the appropriate appointment Contracts. IHS Lothian will interface with the Project Steering Board acting on behalf of the NHS Lothian Health Board. This structure is in place through the tendering process and will remain so through all phases of the Project up to the Handback Date.

# IHS Lothian's management team

Following the announcement of Preferred Tenderer, we will appoint the NPD Co. Manager and commence an integration process to bring the NPD Co. Manager firmly into the flow and communication process of the project. We will liaise with the Board on the appointment of the NPD Co. Manager to ensure that the Board have an opportunity to review and comment on the NPD Co. Manager's suitability and experience in managing the works at the RHSC and DCN Project.

The NPD Co. Manager will be the key point of contact with the Board from the commencement date of the project onwards and will have direct reporting lines to the IHS Lothian Board. For clarity, John Ballantyne will remain as IHS Lothian's Bid Director up to Financial Close and will then hand over to the NPD Co. Manager who will take on the day to day running of the project on behalf of IHS Lothian.

During all stages of the project following the announcement of the Preferred Tenderer, IHS Lothian's Board will be available to all members of the NHS Lothian Board and their team to discuss any issues, matters or concerns that arise.

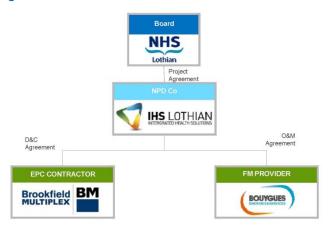
In section B9, we have included the CV's of the members IHS Lothian's Board. Each member of this Board has been selected based on their skills and experience. Each member contributes differently to the operation but will work together as a team to ensure a seamless delivery of the project.

# **Communication and collaboration**

IHS Lothian understands that communication and collaboration is critical to the success of any project. From the outset of the dialogue process we have been committed and have demonstrated an open book approach to delivering the re-provision of the RHSC and DCN at Little France. IHS Lothian will continue to work collaboratively to ensure the Board's requirements are met and we will strive to exceed these requirements.

While formal lines of communication exist within the project structure we believe that being available and open to dialogue through various levels of the respective teams will ensure a smooth running of the process, this better to achieve the Board's desired goals and outcomes. Being receptive, flexible and open to change is important, adaption to requirements and circumstances necessary to ensure delivery as desired.

# **Communication structure diagram**



During the Preferred Bidder Period the formal lines of communication will continue from the tender stage with John Ballantyne being the lead Bid Director and key point of contact. In addition, as mentioned above the members of IHS Lothian are always available to discuss any matters or concerns that may arise. Following on into the Construction Phase of the project the NPD Co. Manager will be the principle point of contact and

available daily to ensure that the Board's requirements are being addressed in an efficient and professional manner. Communication will be controlled through various levels of reporting both written and verbal.

# Reporting

IHS Lothian will issue a monthly status report to the NHS Lothian Board. This report will be issued by the NPD Co. manager on behalf of IHS Lothian's Board and will contain a record of the works progress together with an update on construction progress relative to programme, design development, procurement, Health and Safety, quality control, environmental, HAI-SCRIBE, BREEAM and any Independent Tester matters raised from time to time.

# **Meetings**

In addition to the monthly report the NPD Co. Manager will ensure the Board are kept updated through a series of meetings.

**Liaison meetings:** During the period from preferred bidder to commencement of the on-site construction works, a series of liaison meetings will be held with the various RIE Campus stakeholders and third parties through the Little France Campus Working Group. During these meetings, various key topics will be discussed and reviewed such as:

- Interface issues that evolve over time
- Key deliveries and the campus and construction traffic management regime
- Working times
- Noise/dust control procedures
- Programme and detailed phasing of the works
- Reviewable design date, design development and procured work scope (relevant to any interface matters)
- Works to be carried out in close proximity to the existing campus buildings including all interface activities

These meetings will ensure that IHS Lothian can commence works meaningfully and efficiently following Financial Close. The purpose of these meetings is also to ensure that the needs and requirements of all stakeholders and third parties are considered by IHS Lothian and that these are managed in a professional manner once Construction Works commence.

Following financial close and as part of the agreed governance regime it is intended that a Liaison Committee Meeting is held every quarter during the construction period. This will ensure that senior stakeholder representatives are kept informed on relevant matters which will include progress and programme to ensure timely delivery. These meetings will be attended by members of the NHS Lothian Board, members of the IHS Lothian team and chaired by the NPD Co. Manager.

**Progress meetings:** Monthly progress meetings and site meetings will be held with the NPD Co. Manager as chair and representatives from IHS Lothian including the principle subcontractors will attend. The Board's Representative shall be encouraged to attend such monthly progress meetings and site meetings and have the flexibility to attend such other meetings as the Board's Representative may require.

It is anticipated that the Little France Campus Working Group meetings will be held monthly. They will have the flexibility to be called at other times should the need arise. Members of the MHS Board, Consort, the University and IHS Lothian will attend this meeting to review day to day aspects of the health and safety issues relating to the Campus Site and the Campus Facilities in accordance with Clause 8A of the Project Agreement.

The anticipated schedule of meetings is set out below for further consideration and agreement.

# Construction phase - meeting schedule

Meeting type	Frequency
Liaison committee meetings	Every three months
Progress meeting with The NHS Lothian Board	Monthly

Little France campus working group	Monthly
High level management team consultation (may take the form of a conference call)	Weekly
D&C Co design and construction progress meetings	Fortnightly
Third party stakeholders liaison meetings	As required
Design Workshop meetings	As required
Site safety meetings	Weekly
Internal site construction team meetings	Weekly

# Services phase - meeting schedule

Meeting type	Frequency
Annual strategy meeting	Annually
Annual contract performance meeting	Annually
Liaison committee meetings	Every 3 months
Quarterly service review	Every 3 months
Contract performance meeting with The NHS Lothian Board	Monthly
Operational service meeting	Monthly
Little France campus working group	Monthly
Third party stakeholders liaison meetings	As required
Site safety meetings	Weekly

IHS Lothian has in place a robust and experienced management team which shall oversee the construction phase. This which will consist of a Construction Director, Design Team Leader, Commercial Leader as the senior on site team. This will be supported by an overall technical team consisting of an Environmental Officer, FF&E Manger, Procurement Manager, Senior Planner, Quality Manager, Health and Safety Manager and M&E Manager.

The on site management team will convene a meeting on a weekly basis where the Construction Director will report on progress in terms of adherence to the design development programme and to ensure that the target milestone dates (set out in the construction programmes) are being achieved.

The following members of our Contractor will attend these meetings:

- Project Director
- Construction Director
- Commercial Lead
- Design Team Lead
- Quality manager
- Environmental Manager
- Health and Safety Manager
- M&E Manager
- FF&E Manager
- Procurement Manager
- Senior Planner
- Representatives from the Design Team and specialist subcontractors as required

A weekly meeting will be convened by the Design Team Leader where all members of the Project Management Team will participate. The Construction Director will report on progress of the site on adherence to the Reviewable Design Data schedule contained within the construction programme. This will include the tracking of the procurement and design development of all elements for the project and any deviations from the milestone dates will be identified at an early stage, and D&C Co will take the necessary corrective action to ensure that the start on site dates and regular process are not affected. Any required changes to the construction programme will be submitted to the Board's Representative in accordance with the review procedures outlined in Schedule 8.

# B8.1.1.1.1 Clarity of approach to consortia management

We understand that communication and clarity of communication is critical to the success in delivering the new RHSC and DCN. Continuity of personnel and the project knowledge held by key delivery staff is recognised as invaluable to all parties.

With this in mind IHS Lothian currently through John Ballantyne as Bid Director, have a single point of contact with The Board. John will remain in this role throughout the Preferred Tenderer period ensuring that Financial close is appropriately managed. During the Preferred Tenderer period, John will work alongside the NPD Co. Manager to ensure a smooth transition and knowledge transfer takes place prior to construction start.

Following Financial Close and from this point onwards the NPD Co. Manager will be the single point of contact with the NHS Lothian Board. John Ballantyne will remain on in a deputy role and as a member of IHS Lothian's Board.

While formal lines of communication are in place, members of IHS Lothian's Board are and will remain available to discuss any matters that members of the NHS Lothian Board or their stakeholders may have throughout the project.

# B8.1.1.1.2 Robustness of approach to consortia management

Robustness within the management of IHS Lothian is viewed as crucial to ensure a smooth management of the project. Members of IHS Lothian's Board are integral and active within all aspects of the tender delivery and understand all aspects of the development and proposals. Members of IHS Lothian's team attend regular consortia integration workshops, design team meetings, lifecycle workshops and procurement strategy meetings. In addition legal meetings and the project Steering Committee meetings are also held regularly. Knowledge will be shared and transferred during these sessions. At any particular time the principal members will have a full understanding of the status on all aspects of delivery.

Following the appointment of the NPD Co. Manager, this individual will undergo an induction session with the principal members of IHS Lothian and only when this individual is fully aware of all necessary aspects will the NPD Co. Manager become the key point of contact. John Ballantyne will remain a key part of the project team and so the transition will be smooth with no disruption to the Project Delivery.

# B8.1.1.1.3 Quality of approach to consortia management

IHS Lothian has chosen our team based on skills possessed by the individuals that have been appointed to the project. Each member has a key strength with knowledge and experience in the Healthcare and PPP industry. Combined there is great depth in the members collective knowledge, strength and experience in delivering the specific needs of the NHS Lothian Board.

Communication is critical to the success of the re-provision of RHSC and DCN at Little France. Our approach is to have open lines of communication at all stages through the process providing the Board with the knowledge that the IHS Lothian team are available to discuss and address all matters the Board wish to discuss.

# B8.1.1.2 Key roles and responsibilities of the consortium

# NPD Co. Board

IHS Lothian's Board brings a wealth of experience in managing Healthcare PPP type projects. The members of the Board have previously or are currently members of other Healthcare Boards and with this knowledge bring a detailed level of understanding to the IHS Lothian Consortium. This is the decision making entity and reflects the equity structure. The IHS Lothian Board composition is set out in the Articles of Association. It consists of A Directors: AA Directors + AB Directors nominated by the equity holders plus 1 B Director to be nominated by SFT ie. the Public Interest Director.

Macquarie as principle equity investor will include Mark Bradshaw and Brian Saunders as directors both of whom posses Healthcare and PPP Board experience. Full experience together with their role as Board members is set out in the Proposed Personnel Section in B9.1.

# NPD Co. Liaison Committee

In addition to the NPD Co Board we have selected a core team of key members for the consortium to sit as the NPD Co Liaison Committee to ensure support, knowledge and experience is provided for the smooth operation of the project at each stage. The composition of this committee includes Mark Bradshaw and Brian Saunders (Macquarie) as above plus the following:

Brookfield Multiplex as the D&C Contractor will have two members on the committee, these being John Ballantyne and Paul Serkis. John is the consortia's Bid Director and the Board's key point of contact during the tender and preferred bidder stages of the project. Both John and Paul possess a wealth of Healthcare and PPP experience. Further details of their experience can be found in section B9.1. They will be supported by Mike Sharples who will bring the support of the European Board of Brookfield Multiplex.

BES as the Service Provider will initially have one member on the Liaison Committee, Steve McDonald. He is actively engaged in the Healthcare Services industry and possesses a great depth of knowledge around the particulars and regulations within the industry. Steve has been involved from the outset of the project and ensures that focus on the operations end is at the forefront of the consortia.

# NPD Co. Bid Director

During the tender period and the preferred bidder stage, John Ballantyne, a highly experienced infrastructure professional is leading the IHS Lothian Consortia. John's experience brings integration of construction and operations specifically in the healthcare industry into the team. Furthermore John's local knowledge of the markets and understanding of the local political needs and agenda ensures that IHS Lothian will deliver to the needs of the Board and the local community.

John has been working actively in this Bid Director role for the consortium since its inception and will remain a key part of the IHS Lothian team throughout the project.

# NPD Co. Manager

During dialogue meeting no 6 we introduced HCP who will be working as part of IHS Lothian. As stated we intend to appoint the NPD Co. Manager following the announcement of the Preferred Bidder. The NPD Co. Manager we propose is Wallace Weir (who's CV is included in Section B9.1). Wallace will work as part of the team supporting John during the Preferred Bidder period being inducted to the entire project team, stakeholders and projects needs.

As noted earlier IHS Lothian envisages this appointment to be fundamental to the project and will be actively working with the NHS Lothian Board to ensure your needs and requirements are achieved.

The NPD Co. Manager is a senior individual within the Infrastructure market and possesses knowledge of the PPP industry together with experience in healthcare projects. William Weir in fulfilling this role understands the importance of the operational aspects of hospitals, as it is key to deliver a successful construction phase while ensuring no disruption to the RIE Hospital or other parties on or adjacent to the RHSC and DCN campus.

# B8.1.1.3 Technical roles within the consortium

# B8.1.1.3.1 Technical roles within the consortium during contract finalisation

During contract finalisation from the award of the Preferred Bidder to Commencement date we will ensure that sufficient and experienced resources are dedicated to ensuring the delivery of the re-provision of RHSC and DCN at Little France.

Our team many of whom you have met during the tender period will continue during the contract finalisation period and below are the key roles and leads:

# Bid Director - John Ballantyne

As Bid Director during dialogue and prior to Financial Close John will coordinate and oversee the successful delivery of the tender and the Board's requirements ensuring that the responses to NHSL questions through the ITPD documents and at dialogue have been fully addressed. He will ensure the appropriate team members of IHS Lothian are in attendance at further Preferred Bidder and other related meetings. He will also ensure the IHS Lothian team members are fully supported by their respective organisations in the delivery of a high quality bid submission and closure of documents.

# Bid Manager - Brian Saunders

As Bid Manager, Brian will support John in the management and coordination of the tender delivery and throughout the contract finalisation stage. Brian will actively manage the Technical due diligence for both the funders and junior debt provider ensuring that the all parties are comfortable with the proposals developed at address the construction and services output specification together with industry regulations. Brian will also lead the insurance workstream and ensuring integration of the financial modeller within the lifecycle development process.

# Over all Technical Lead - Paul Serkis

Paul will lead the Technical workstream ensuring integration of Construction and Services to deliver the best value for the re-provision of RHSC and DCN at Little France. Paul will work together with the other key members of the bid team to bring together all technical disciplines to ensure that NHS Lothian, the Junior equity partner and the funders' needs and requirements are met by IHS Lothian in the proposals and contract documentation. Paul will also work with the legal team to deliver the D&C Contract for financial close and with the FM team to ensure that the interface agreement is robust and in place.

# Legal Lead - Juan Miguel Custodio

Juan will coordinate all legal input into the Contract finalisation together with IHS Lothian's legal adviser. Juan will be responsible for negotiation of all Project documents and funding documents during this period and will leverage his sector experience to ensure a speedy delivery of these. Juan will also manage the funders' legal due diligence so that the Board and funders achieve a satisfactory position with best deliverability and robustness possible.

# Financial Lead - Sylvain Delion

Sylvain will lead all financial input from the Tender stage through the contract finalisation stage. Sylvain will advise on best value debt structuring and manage the relationship with the funders. Should a preferred Tenderer funding competition be necessary Sylvain will work with the Board and their advisers to ensure transparency as the competition progresses. Sylvain will also play a coordination role in managing funders' due diligence so that funders obtain required approvals in a smooth way as well as financial documentation drafting and negotiations with funders until financial close

# **Project Director - Mike Sharples**

Mike will manage the design and construction elements of the project and during the contract finalisation period. Mike will coordinate the Design Lead and Construction Director to ensure the contract deliverables are closed out speedily to facilitate a swift financial close process.

# Services Lead - Steve McDonald

Steve is responsible for coordination of the delivery of Facilities Management and Lifecycle solutions ensuring that his team interact with the Design and Construction team. This will ensure the delivery building that is fit for the needs of the Board and the facilities team. During the contract finalisation period Steve will work with the legal team to deliver the Services Contract and also work with Mike and the construction team on the interface agreement.

# Design Lead - Darren Smith

Darren is managing the design development and production process for IHS Lothian during the tendering process. He will continue in this role from the notification of preferred tenderer on through to the target service commencement date. Darren has established comprehensive lines of communications with all members of our Design Team and has ensured that FM integration into design is delivered by working closely with Didier Blanchet as lead FM. Darren's experience also means he can meaningfully challenge the consultants in terms of maintenance and layout so the design promotes LEAN construction, LEAN management and will reduce operational cost.

# Construction Director - Alan Keeley

As Construction Director Alan will commence preparation for the site set up ensuring that accommodation, plant and resources are mobilised for an immediate start following financial close. Alan will have substantial input into subcontractor selection ensuring that construction management staff and procedures are in place and in operation. Alan will also commence the engagement with the Little France Working group and other stakeholders to ensure their needs are addressed including Health, Safety, Environment and Quality.

# B8.1.1.3.2 Technical roles within the consortium during construction stage

# NPD Co. Manager - Wallace Weir

Wallace will be responsible for the day to day communication and delivery of the works to the NHS Lothian Board. The NPD Co. Manager will report directly to the IHS Lothian Board and oversee all aspects of the NPD project including reporting on Programme and Progress, Independent Tester, Quality and Health and Safety, Financial position and any legal matters that may arise.

# **Project Director – Mike Sharples**

During the construction stage of the project Mike is the Executive Director responsible for the delivery of the Works. Working alongside the NPD Co. manager, the Board's representative, Independent Tester and the

Funders Technical adviser Mike will ensure the Works are delivered to the contract requirements ensuring quality and cost efficiency.

# Services Lead - Steve McDonald

Steve will continue to ensure that his team interact with the Design and Construction team and hence delivering a building that is fit for the needs of the Board and the facilities team. Steve will also commence his mobilisation team during this period to ensure that a seamless transition takes place from Construction into services. As the construction works progress Steve will monitor the commissioning stages from a services delivery point of view to ensure that the services team have a detailed knowledge of the functionality of the building in advance of commencement of the service.

# Design Lead - Darren Smith

The coordination of the Design Process for the duration of the project will be managed by Darren. This will include the monitoring of the performance of the individual consultants with particular emphasis on achieving milestone dates for the production of quality information in line with the Overall Design Development Programme. The milestone dates in the design development programme will have been set by the construction programme which is systematically linked to the procurement process and the RDD process. The Design Team Leader will use the Overall Design Development Programme to ensure that the Design Team functions are being delivered to maintain the construction programme.

# Construction Director - Alan Keeley

Alan will set the site up in accordance with Construction Contract Requirements, allocating construction staff, roles and responsibilities. Alan will co-ordinate construction, design, planning/programming and commercial departments, maintaining an overview of the whole project construction process reporting directly to Mike. Alan will ensure that the construction works are carried out in a manner that will not disturb the day to day running of the hospital or the other campus party properties. As part of Alan's construction team will be individual staff responsible for the quality management of the specialist trade activities. The operations will accord and comply fully with the Boards requirements in regard to such matters as HAISRIBE.

# Lead Architect - Lorraine Robertson

As lead architect, Lorraine will liaise with the Board and IHS Lothian directly to ensure delivery of the fully coordinated design and contract documents. Lorraine will ensure that any alterations that may arise are not at the expense of operational functionality of the building.

# Lead C&S Engineer - Barry McCormack

Barry will continue to be responsible for the successful delivery of the structural design for the re-provision of RHSC and DCN at Little France. Maintaining the continuity of the existing IHS Lothian design team he will ensure that the benefits of the structural design developed thus far are fully realised throughout the subsequent stages of design development.

# Lead M&E Engineer - Stewart McKechnie

Stewart's key role will be to lead the MEP solutions design team in which he will be an active and participating member responsible not only for the delivery of designs but also for ensuring that these have been checked and challenged by the peer review team. Stuart will also oversee the sustainability and BREEAM elements of the works to ensure the contractual requirements are met and where possible exceeded.

# B8.1.1.3.3 Technical roles within the consortium during operations stage

# NPD Co. Manager - Wallace Weir

Wallace will continue to be responsible for the day to day communication and delivery of the service works to the NHS Lothian Board. He will continue to report directly to the IHS Lothian Board and oversee all aspects of the NPD project including reporting on Services delivery plans, Lifecycle reviews, Quality and Health and Safety, Financial position and any legal matters that may arise.

#### Services Lead - Steve McDonald

During the Services stage of the project Steve will be responsible for the delivery of the Services Works. Working alongside the NPD Co. Manager, the Board's representative and the Funders Technical adviser Steve will ensure the Services and Lifecycle works are delivered to the contract requirements ensuring quality and efficient delivery with no disruptions to the health services being carried out by the Board.

#### B8.1.1.4 Project and programme management

We have structured our team to lead and respond to the various work streams during the various stages of the project. During the bid stage our team has worked collaboratively for the benefit of the project and we see this continuing through into the follow on stages. Our culture and approach will assist in the smooth running of the project using robust management systems that have been in existence for many years in within our consortium members.

#### B8.1.1.5 Risk management

Our approach to risk management is to provide you with the comfort we will manage those risks allowing the Board to deliver its vision provide quality healthcare. We operate a risk register which allocates those risks to the parties best able to manage them whilst also providing value for money and maintain standards of quality. The risk register will be maintained by Project Co. and regular risk management meetings will be held to ensure those risks are being mitigated and/or managed. Whilst many risks rest with IHS Lothian, there remain some risks that sit with the Board. However, we believe it is in the project's interest to work collaboratively as partners and we promise to assist you in mitigating those risks.

#### B8.1.1.6 Design management

The development of the design during the dialogue stage has been a collective process. Working together by testing the reference design and preserving those areas already established has allowed us to submit an enhanced design for your consideration. We will continue to manage the design process and ensure it remains compliant providing the Board with regular updates. This will be through through formal and informal meetings together with the design development and Reviewable Design Data process. Our design management has also enabled a combined solution to be offered which takes on board both NHS Lothian and our FM operator's requirements. The management of design is detailed further in Section B14.

#### **B8.1.1.7** Works

As a Consortium our team includes a global contractor in Brookfield Multiplex who deliver complex projects around the world. In particular, they have a strong track record in healthcare delivery and have all the systems in place to deliver a quality hospital. Our management team will work closely with our contractor to ensure we bring out the best in class, practice and standards supporting our reason for choosing them.

#### B8.1.1.8 Services

IHS Lothian has in BES selected an FM operator whom we trust will deliver exceptional services. They have a successful track record in delivering hospital FM services and have from the very start been committed to this project. We have carefully managed the interface of FM and Construction disciplines through regular dialogue and continual partnership. (Section B7 describes this in more detail). As a result, we believe our submission is totally integrated, seamless and will provide benefits for you over the concession period. We will manage the Services working closely with our operator at each stage to ensure we provide you with the high standards that are expected from us. We will do this through regular liaison meetings, reports and informal and formal training.

## B8.1.1.9 Quality, Safety and Environmental Management (including HAI-SCRIBE and BREEAM)

Our approach to quality, health and safety and environment management is described in more detail in section B12 and B13. To summarise, we will operate robust systems to ensure quality, health and safety and environmental management which are evidenced through accreditation by certified bodies. Our Contractor and Services Operator are also accredited and have included certificates with in our submission.

#### B8.1.1.9.1 HAI-SCRIBE

We recognise the importance of Healthcare Associated Infection System for Controlling Risk in the Built Environment (HAI-SCRIBE) and have discussed these requirements in various meetings to ensure our team are fully appraised and understand these requirements. Our commitment to you is to ensure we actively manage the integration of these requirements and will through a series of workshops with you demonstrate how we have applied it through an implementation strategy. Further details are included in Section C1.

HAI-SCRIBE covers design, construction and operation and we would welcome your views and input to ensure we deal with this strategy on a collaborative basis.

#### B8.1.1.9.2 BREEAM

Our approach to BREEAM is to ensure we deliver to the standards required by achieving a BREEAM rating of 'Very Good'. We have carried out a BREEAM pre—assessment and confirm we have achieved the required rating. We will continue to monitor the assessment through the next stages to ensure we score the maximum points. Our commitment to you is to ensure we achieve such rating whilst also providing value for money. Further details of our approach to BREEAM are included in Section C19.

## B8.2 CONSORTIA MANAGEMENT'S APPROACH TO SUBCONTRACTORS

#### **B8.2.1** Introduction

To deliver the Board's requirements to the highest standard, IHS Lothian has assembled two major global companies with a track record and ability to bring the best in class subcontractors, suppliers and designers under one integrated team. The Works will be delivered by Brookfield Multiplex Construction Europe Ltd (BM) and the Services will be delivered by BES.

#### B8.2.2 Contractor's procurement process

IHS Lothian has complete confidence in our contractor Brookfield Multiplex to engage appropriate subcontractors having already assessed the process and procedures used within the organisation. We are confident the selection process will provide the re-provision of RHSC and DCN at Little France with subcontractors that will bring value to the project and deliver the Board's vision and satisfy the Board's requirements.

Procurement milestones to be delivered by our contractor will be included in the project programme to be monitored by IHS Lothian. This will ensure resources and materials are available as required, and delivered in timely manner to the quality expected for this project.

Our tender phase programme includes the long lead time packages for procurement; all other package procurement will be planned and programmed within a month of Financial Close. This early engagement will help our partners to plan their commitments, ensuring cost-effective delivery and availability of their best resources.

#### B8.2.2.1 Contractor's tendering/selection process

Brookfield Multiplex (BM) has developed comprehensive procedures relating to the procurement and administration of subcontractors and suppliers that are catalogued within their company's Project Administration Manual (PAM). The PAM is a document which has evolved over many years to promote best practice and exceed statutory, contractual and corporate standards. The PAM denotes the policy and procedures for the management and administration of all of BM's projects globally and supports and underpins their ISO 9001 (2008) and SOX (2002) QMS compliance certification.

BM maximise their application of purchasing power within the market that is secured by their turnover and mature relationships within the market. They manage their supply chain to ensure that effective performance is achieved by working as a truly integrated, collaborative project entity. For bulk materials such as concrete, steel and aggregates; BM's long-term proven relationships with the supply chain companies improves performance. In this way BM can leverage competitive rates and assurance that the quality and safety culture of our suppliers is to BM's exacting standards. By investing time in relationships, IHS Lothian and BM can gain an insight into the cost, risk management, quality performance and health and safety drivers on both sides of the supply chain and improve our interfaces and performance for the benefit of all.

The process by which BM selects their supply chain and subcontractors can be summarised in the table below.

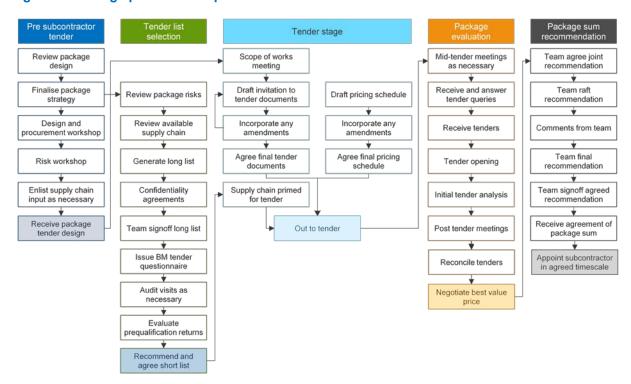


Figure 1: Package procurement process

The BM team meet regularly to agree the procurement strategy on selection of specialist suppliers or combining of packages according to value, risk, quality issues and complexity in accordance with the procurement milestones within the programme. Once this list of packages has been established a long list of potential suppliers is established and a vetting process shall commence to compile a shortlist as further described below.

#### B8.2.2.2 Contractor's short listing

The shortlist for the tender stage of suppliers shall utilise BM's selection procedures to identify companies and organisations able to demonstrate the following key performance characteristics:

- Financial stability allied to appropriate capacity
- A record of having successfully delivered similar projects of equivalent value
- Effective management of quality
- Information management capability
- A suitably experienced management team, available for and committed to the project
- Access to appropriate labour resource
- Capacity within their current workload
- Trade organisation memberships
- Appropriate levels of insurance
- A non-adversarial and collaborative approach to business relationships
- Evidence of an acceptable culture and record with regard to safety, health and welfare
- An ability to offer innovative contribution to support value creation, design development, building methodology and overall risk management
- Effective delivery of community engagement benefit targets
- Environment
- Design capability

The shortlisting assessment criteria are described in further detail below:

#### Financial stability and capacity

For each potential subcontractor, BM obtain independent third party credit checks (Experian or Dunn & Bradstreet) to provide a general assessment of the subcontractor's current trading status.

Provided such checks are adequate given the size of package, complexity and risk (and minimum BM scoring standards), BM will undertake a systematic examination of published accounts in order to confirm that the business is likely to continue to trade successfully. This examination is carried out by senior members of the commercial team in conjunction with the financial control team in desktop studies.

In outline terms, these checks entail an examination of the relationships between the following criteria;

- Business turnover
- Net and intangible assets
- Debt (including cost of servicing, leasing costs and liabilities)
- The value and duration of the package under consideration

These values are extracted from the information available and applied to a BM bespoke scoring matrix. The score will indicate either of the following:

- Immediate acceptability for consideration
- A requirement for further investigation
- An immediate rejection

In the case of 'further investigation' the possibility of inclusion is investigated by BM's financial controller, involving a thorough examination of any significant issues, and a face to face interview with the prospective subcontractor's senior financial management.

Based on the outcome of those investigations, BM may reject the pre-qualification application or elect to allow the subcontractor through subject the implementation of prescribed actions and package security measures.

For incumbent subcontractors within the supply chain, BM carries out regular checks as new published data becomes available. BM requires that they make an annual presentation of current management accounts to remain within the supply chain.

#### Relevant experience

BM selected subcontractors must have a record of having successfully delivered similar projects of equivalent value. Third party references, site visits and interviews will be undertaken in order to assess their capability and experience. The experience must reflect our aim to achieve reliable and consistent quality supplies.

**Quality management – Potential** subcontractors are required to hold as a minimum ISO 9001 setting out the requirements for meeting quality management systems. In obtaining references through the 'Relevant Experience' section of supplier selection, we shall evaluate how consistently the quality systems result in a product that is 'right first time' and meets the client's requirements. To maximise the quality from our supply chain, where appropriate we shall purchase more from fewer suppliers to ensure better quality at a greater cost effectiveness.

#### Information management

Subcontractors are made aware of the information management system that will be implemented on the project and their responsibilities are explained. Suitable training and guidance are provided to all appointed subcontractors. The subcontractor must demonstrate appropriate quality controls in line with ISO 9001 to ensure successful handover of the project.

Our mature supply chain has also developed integrated electronic trading systems for order and invoice processing to reduce transaction costs and improve efficiency.

A suitably experienced management team, available and committed to the project - In prequalification submissions, BM requires individual CVs to be supplied for the proposed key members of the team as well as those personnel who will have direct influence on the business relationship going forward and BM insist on meeting those individuals face to face.

Access to appropriate labour resource – Often a local consideration, BM will ask for details of the way in which access to labour is managed, either directly employed or externally sourced, local or national and BM would expect a detailed appraisal of resource requirements together with a plan for availability relevant to the work in hand.

**Current workload** – Existing and potential subcontractors are required to provide details of current workload, its timing to completion and the planning of future turnover. This data is used to assess the potential short to medium term capacity for engagement and any impact of the award of the work under immediate consideration on the organisation's ability to operate effectively.

**Trade organisations –** Subcontractors are requested to provide details of company membership of any trade organisation.

**Insurances –** Appropriate levels of insurance are held are confirmed and statements from brokers collated following an assessment of the risk that the elements that the subcontractor is providing.

**A non-adversarial approach to business relationships –** Although more difficult to verify for new entrants, this standard is central to the Brookfield Multiplex core culture.

BM take up external references using questions aimed at assessing subcontractors' alignment with these values. Potential new entrants are visited at their premises, and interviewed both generally and specifically in relation to the particular project for which they are being considered.

The importance of this non adversarial approach is key to the culture that BM strives for and continues to achieve within their subcontractor appointments. BM prides itself on the relationships it has developed with its subcontractors to date. This resulted in a significant number of repeat contract orders being placed on our projects whilst still maintaining a very competitive pricing policy. Repeat business instils pride in the work undertaken and as such quality at the highest standard is achieved first time.

#### Evidence of an acceptable culture and record with regard to safety, health and welfare

BM requires its subcontractors to hold as a minimum, the following full accreditation:

- The Contractor's Health and Safety Assessment Scheme. (CHAS). This standard certifies that a business has achieved acceptable standards in the management and recording of their processes for Health and Safety Management
- ISO 14001, which represents the core set of standards used by organisations for designing and implementing an effective environmental management system

BM passes on a culture of continuous improvement towards health and safety within our supply chain. We pass our corporate AFR goals down through the project to our supply chain and encourage our subcontractors to develop a continuously improving health and safety culture beyond the influence of the project through engagement, training and assistance.

## An ability to offer innovative contribution to value creation, design development, building methodology and overall risk management

BM's interview process is designed to draw out examples of where innovation has been applied in previous experience as well as inviting suggestions based on the outline brief and any existing proposals already in place.

An assessment of a subcontractor's access to research and development programmes, partnerships with a range of systems manufacturers, and access to internal design expertise are some of the indicators of a supplier's ability to innovate and continuously improve. BM strives to support innovative construction solutions within our supply chain that delivers on the grounds of quality, health and safety or environmental impact.

#### Effective delivery of corporate responsibility targets (including SME delivery)

BM work closely with our supply chain to ensure that our ethos of Corporate Responsibility is passed down. Where necessary, this may mean further engagement with the supply chain to establish and mature the culture within the subcontractor. In particular, an assessment of the subcontractor's track record and proposed commitments to delivery of community engagement including evidence of apprentices, training, local employment and charitable and social engagement.

We encourage responsible procurement from within BM down to our supply chain. Our key goals are to:

- Encourage a diverse base of suppliers
- Promote fair employment practice
- Promote workforce welfare
- Meet strategic labour needs and enabling training opportunities
- Achieve local community benefits
- Ethically source materials
- Promote greater environmental sustainability

BM's own corporate responsibility and community engagement is explained in more detail within section B6. However, through our subcontractors and their supply chain, we aim to provide a diverse range of suppliers where possible on the project whilst delivering our procurement strategy as outlined above. We therefore intend to encourage a diverse base of suppliers to our subcontractors on the project for Small to Medium Enterprises (SMEs). Our goal is to involve a substantial number of small to medium enterprises.

SMEs shall meet at least two of the following criteria:

- Turnover per annum of up to £6 million.
- Balance sheet total of no more that £3 million
- 50 employees or fewer.

Medium enterprise is a business which meets at least two of the following criteria:

- Turnover per annum of up to £23 million.
- Balance sheet total of no more that £12 million
- 250 employees or fewer

#### B8.2.2.3 Contractor's selection of suppliers

Once the above has been assessed, a short list shall be created by the procurement team and these subcontractors/suppliers shall be invited to tender based on predetermined quality and price criteria appropriate to individual packages for supply or work.

The procurement process will continue alongside the design programme to ensure relevant information is available for tender purposes at the right time. At the tender stage (post short list selection), design tender information (RIBA E/F) shall be available from the architects and mid tender meetings will be held amongst the BM procurement and construction team, at which point a BM package manager is assigned to deliver the subcontracted works. The package manager and procurement manager will ensure that the correct and relevant technical, commercial and contractual documentation is released and agree a risk management strategy within the subcontract to deal with future unresolved design interfaces that may not be determined through a fixed price element of the contract. The package manager will operate, monitor and distribute among the project team a Q&A policy for bidder queries. Involvement of the design team is critical to ensuring that identified risks are designed and priced out to provide cost certainty within the second stage procurement process.

Where it is decided to single source, this strategy shall be agreed by the procurement team and a strategy paper shall be submitted to BM's Executive Director Construction to the project for sign off. Single sourcing with a negotiated contract shall be undertaken only with supply chain partners that have extensive and proven experience with BM projects that are able to fulfil all of the criteria above and are able to demonstrate similar project experience where market to market pricing is possible.

The package manager and procurement team shall assemble and issue the subcontract documentation to the successful bidder in order that const certainty and construction programme may be secured.

#### B8.2.2.4 Contractor's key subcontractors pre-selected

IHS Lothian and our Contractor BM have identified key packages for procurement during the tender stage to ensure full engagement through the tender and Preferred Bidder process to Financial Close. This has allowed the design and cost plan to be developed with a level of certainty and detail that will ensure successful execution. Those key supply chain already selected, some of whom have attended the dialogue meetings are set out below:

**Dunne Group (superstructure) –** Established in 2001, the Dunne Group has become one of the UK's most sought after companies in the specialist areas of infrastructure, civils, substructure, superstructure and RC frame construction, industrial concrete flooring, post-tensioning, specialist plant hire, design and build of commercial/industrial units and car parks.

Mercury Engineering Ltd (mechanical and electrical services) – Mercury have been active in the UK for over 25 years, their areas of expertise includes delivering Mechanical, Electrical, Fire Protection and IT services across a wide spectrum of sectors. Recently, the company has provided services for substantial projects in healthcare, data centre, industrial and commercial sectors. Mercury takes pride in working with their clients to provide the highest standards of innovation, quality and safety. Mercury UK is a regional player, with a robust supply chain and proven track record in delivering successful projects throughout The UK.

**Prater (roofing and envelope) –** Prater has huge experience in roofing and envelope works gained from almost every market sector and complex buildings. Their systems, suppliers and people provide high quality finishes and have been delivering projects for across the UK.

**Astins (drylining and partitions) –** Astins has extensive UK hospital fit out experience including New South Glasgow Hospitals, Peterborough Hospitals, Pembury Hospital, Newcastle RVI and Walsall Manor Hospital. Astins also bring their community engagement vision in the form of the 'Astins Institute' that aims to transform the lives of people through industry learning and leaving an employment legacy.

It is important to note, the selection criteria has been applied to these key supply chain partners. They have been involved from the start of the process and contributed to the development of the design. It has also enabled a cost plan to be developed to ensure a competitive price is achieved but that is also robust.

#### **B8.2.3** Service Provider's procurement process

IHS Lothian has complete confidence in the systems that our Service Provider BES has in place. BES offers a self delivery model where only specialist suppliers are source externally. This ensures we are able to offer the Board the benefits of the extensive in-house supply chain and specialists. Routine and complex trades are managed by us to avoid risk and secure certainty of delivery performance.

#### B8.2.3.1 Benefits of self delivery

Self delivery by our Service Provider shall bring transparency, trust, openness and honesty across the provision of services in the FM period. Commonality throughout the team in acceptance of our Service Provider's policies shall ensure delivery of these exacting standards to the Board. These include:

- Health and Safety policies are maintained and monitored for continuous improvement without being locked into a concessionary period in a subcontract
- Environmental policies become more flexible and BES is a world leader in advising and providing environmentally sensitive services for our customers. Through self delivery, we are able to maintain this approach
- Corporate responsibility is retained in house and not subcontracted out to suppliers that may not have the same ethos as BES to its engagement with the local community
- Culture ('can do', flexible and problem solving)
- Non adversarial working
- Consistent management of service in an open, transparent way
- Guaranteed early advice and support to the Board during service
- The ability to react swiftly and efficiently to change or unknown circumstances by a coordinated BES resolution, avoiding the need for contractual agreements with external subcontractors (such as protracted negotiation of Change)
- Directly employed personnel ensure that we are able to control the level and quality of service provided throughout the life of the concession at all levels
- Consistent management team is guaranteed without the risk of changing supply chain and subcontractor management
- Economy of scale and efficiency of savings across the size of the BES group
- The expertise and experience of BES is incentivised into action without it being a 'subcontractor problem'
- By applying our own processes, systems and procedures, BES is able to provide assured delivery of services

#### B8.2.3.2 Service provider's tendering/selection process

BES systems cover a rigorous vetting procedure for prospective subcontractors and suppliers before they are added to our Approved Subcontractor and Suppliers List. This vetting procedure ensures that all subcontractors and suppliers display the appropriate competencies and have a proven track record in delivering services. This process includes financial, quality, health and safety, environmental and if required for the subcontract in question, security criteria. If required we can provide, as a supporting document, the BES Subcontractor Supplier Questionnaire (Form BYES-FM-PRO-F-02).

In completing this questionnaire prospective subcontractors are requested to enclose the following information:

- Financial and business stature (and Parent Company details if applicable)
- Record of achievement, experience and knowledge of the relevant healthcare environment
- Insurance details
- Proven Quality Management, Health and Safety and Environmental management systems, policies and procedures as well as certifications and accreditations
- A long-term ability to meet the requirements in full and on time
- Ability to adopt back-to-back contractual arrangements and agreement to performance related supply conditions
- A pricing structure that represents value for money
- A willingness to work in an open and transparent relationship
- Trade Association Membership, special trade certificates and licenses
- Certificates of competence for personnel
- References of previous/current contracts

The information returned is then assessed by the Procurement Department, our Quality, Safety, and Environmental (QSE) Department and Contract Managers to ensure prospective subcontractors meet our standards. Additional checks are made with the HSE and a credit check completed.

As a result of our self delivery model the number of subcontractors are limited to specialist contracts many of which will be with the supplier and installer of the specialist equipment arranged at the time of purchase to ensure the Lothian Board receives the best value for money and the appropriate warranties and guarantees are in place.

Prior to the commencement of services all sub-contractors will have agreed to BES standard terms and conditions, which will ensure back to back requirements in service delivery to ensure that performance standards required by the Board are met at all times.

In return we will employ fair payment practices in line with good practice.

Our Service Provider seeks to maximise the relationship with the subcontractors by offering them the opportunity to sign fixed term agreements and to operate on a 'preferred contractor' basis across their portfolio of contracts thereby securing favourable rates based on the amount of turn over invested in them.

IHS Lothian, and BES, understand and support your objective, and that of the Edinburgh Partnership, to support the development of the SME sector by developing a procurement approach which facilitates the opportunity of procurement opportunities in relation to service provision. Equally IHS Lothian and its Subcontractors will reflect the Scottish Government's policy on Social Enterprise and believe that Social Enterprises have a distinct and valuable role to play in helping to create a strong, sustainable and socially inclusive economy.

To support local subcontractor access the business opportunities the Service Provider will work collaboratively with local business organisations to actively generate local participation. Other activities will include Subcontractor Open Days and a supply portal on the website.

Annual performance reviews will be undertaken with all subcontractors to validate performance and support organisations meet standards.

#### B8.2.3.3 Selection of design team and other consultants

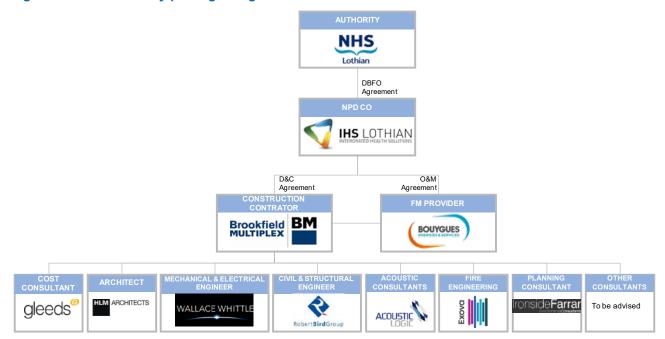
Our Contractor partner has selected a dynamic and collaborative design team with a track record of designing first class state of the art hospitals. Within these consultants we have a team of people who are dedicated to the project and bring with them a wealth of experience both from the health care and other sectors. They are keen to work with the Board developing the final elements of design and in the process help bring to life the Board's Requirements.

The selection of these consultants was based on a set of criteria which covered to the following:

- Track record
- Financial standing
- Insurance
- Capability and workload allocation
- CDM compliance
- Design and QA systems
- Approach to Health, Safety and Environment
- BIM capability
- Approach to innovation and best value
- Approach to working collaboratively

The organisation chart below in Figure 2 sets out the key disciplines within the team. Further specialists will be appointed to the team as the project progresses using the criteria above.

Figure 2: Consultant key packages organisation chart



#### B8.2.4 Securing the peformance of the subcontractors

#### B8.2.4.1 Securing the overall performance of IHS Lothian

Below is a summary of how IHS Lothian will manage and govern the Works and Services.

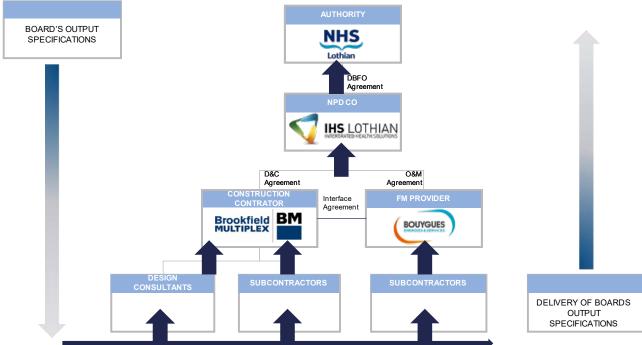
#### We will ensure:

- The design and build contract, service provider contract clearly allocate responsibilities and flow down between the parties from the project agreement
- An Interface Agreement is executed regulating responsibilities between our contractor and services partner
- The appropriate subcontract conditions are established that pass down the correct level of risk to the subcontractors and the supply chain by the contractor and service provider
- We monitor the construction activities with lenders technical advisor and Independent tester through milestone reviews and operate the contract through a series of performance measurement mechanisms and contract led incentives
- Obtain operational period monthly performance reporting to monitor progress of the project against the requirements of the Board's output specifications
- Promote collaborative engagement with all parties at each stage (for further details on this refer to section B8.1)
- IHS Lothian's Board provides appropriate leadership and point of contact for liaison and review at levels

The chart below in Figure 3 demonstrates the flow down of contractual obligations and importantly the link between the construction and operational partners to ensure a joined up approach.

Figure 3: Contract obligation 'Pass Down'

Interface between consortium parties – delivery of Board's output specifications



## B8.2.4.2 Securing the performance of IHS Lothian subcontractors to the contractor and service provider

**Subcontractor contract terms:** In all cases, the second tier subcontract conditions will reflect the appropriate requirements and obligations of the pass downs from the Project Agreement to the Contractor and Service Provider through the primary tier Subcontract. In some cases, this may be deemed to be a full pass down of risk however, the key to establishing the most appropriate subcontract form is the identification and allocation of risk. The Contractor and Service Provider will also assess the status of the available design, the key interfaces with other works, programme certainty, programme criticality and the opportunity to introduce innovation or value engineering. The nature of the subcontractor shall be considered and appropriate selection of the supply chain shall be established in accordance with the tender procedures described earlier. Subcontracts shall be written to reflect the quality management and control processes required of the project and the Contractor and Service Provider, compliance with the project quality plan and compliance with the output specifications. The package manager and the procurement manager shall ensure that the relevant specifications are passed to the relevant subcontractor, with the associated drawings for tender issued.

**Performance measurement:** Performance measurement of the subcontractor supply chain begins before the issue of tender documents and continues through to project completion. At tender award our Contractor and Service Provider will establish a mobilisation meeting attended by the package/project manager and procurement manager. At this stage, the procurement manager shall attend the meeting and undertake a handover to the commercial manager who shall run and implement the agreed sub-contract through to completion and shall be responsible for monitoring of the subcontractor's performance with the support of the package manager.

The mobilisation meeting shall not be held until all required documentation under the subcontract has been provided. This includes for the following:

- The QA system or project plan and agreed procedures. (The minimum standard for the assurance system is described below)
- Work will not start until the relevant method statements and risk assessments have been approved
- Work will not start until the relevant inspection and test plans (ITPs) have been approved with the appropriate checksheets. The ITPs will be project specific to the Board's specifications and shall be developed and approved by competent people established within the subcontractors. Example ITPs are requested at the tender stage of subcontractor procurement
- During construction, work will not start until the fabrication drawings/subcontractor elements of the design have been given 'for construction' status by the Contractor (and their design team)

As with all BM and BES projects, ongoing supplier performance is monitored across the company wide supply chain, not just within the singular project, but across all projects. The information is pooled collectively within the organisations and trends/development areas are identified within the supply chain. The purpose is not to identify the shortfalls in performance of individuals but to identify any developing problems at an early stage across the entities that may affect the singular project (e.g. from lessons learnt on other sites, the systems will flag issues such as quality problems with a particular supplier).

This monitoring and scoring of the supply is undertaken monthly and will include the following Key Performance Indicators (KPIs):

- Safety performance
- Environmental performance
- Design performance
- Programme performance
- Quality performance
- Supervision performance
- Resource allocation
- Programme performance
- Pre-site performance
- Documentation performance
- Commercial performance
- Community engagement performance
- Corporate responsibility performance

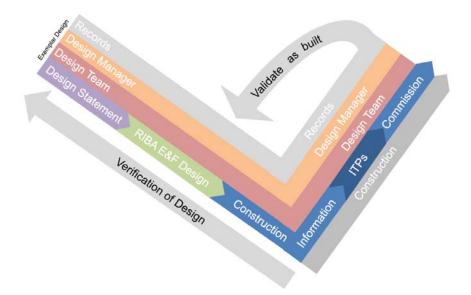
Where performance is trending to an unacceptable level, support will be offered by IHS Lothian and their partners (the Contractor and Service Provider). Improvement plans may be issued with defined improvement goals and timescales; in some cases, external support/consultants may be bought in to assist the subcontractor.

The subcontractor shall attend weekly progress meetings with the package manager, the first item shall be health and safety, the second item shall be

**Validation of works:** Subcontractor works (both installation and service provision) shall be validated against the design. This shall be achieved through the provision of as built drawings, ITPs and associated check sheets (signed off) health and safety files, Factory Acceptance Tests and Site Acceptance Tests, performance monitoring of plant and equipment during service, life cycle planning and operational plans etc. This validation data shall be used to ensure that the design requirements and the performance requirements of the Board's output specifications have been met.

Validation of the design through construction will ensure that the commissioning phase of the project is more readily achieved. Figure 4 shows the validation process in construction back to the design.

Figure 4: Validation process



Snagging of subcontractor works: Nominated Contractor personnel, accepted by IHS Lothian, will raise snagging lists or outstanding works lists at appropriate acceptance stages to record outstanding or incorrectly completed work. Defects identified during the inspection and included in these lists shall also require NCRs to be raised. Where testing and commissioning activities are to follow construction, access shall be provided to testing and commissioning personnel and their snagging/outstanding works list items shall be included in these lists. All snagging, and outstanding works items shall be entered by the Contractor into a database and tracked to closure.

#### Electronic monitoring of subcontractor Provision of services:

**Benchmarking:** The subcontractor's contract terms will highlight any requirements for samples and mock ups that will be available to the Board for review and sign off prior to installation. For critical items that are considered to be important to the Board (above those highlighted as required within the output specifications), benchmarking of finishes shall be undertaken for the Board to agree to. For these items, ITP or check-sheet sign off shall not be achieved by the subcontractor until the Board and/or IHS Lothian has accepted that the finished work is in line with the benchmarked finish.

**Subcontractor integration:** Integration of the Contractor and Service Provider's supply chain into the IHS Lothian team will be achieved through joint initiatives and training to ensure alignment with the project values and goals, mutual benefits from wider learning beyond the project is achieved and optimised overall performance.

Performance measurement on site and in service of subcontractors shall be an open book

**Auditing:** IHS Lothian will audit the Contractor and Service Provider and the maintenance and upkeep of these subcontractor monitoring systems shall form part of the monthly audit. In turn, the Contractor and Service Provider shall audit their supply chain in line with the Quality Management Systems. The audit process shall cover quality, health, safety, environmental and sustainability standards. They will use proven systems and methods to audit and assist the development of the supply chain.

**Early contractor involvement:** IHS Lothian has engaged with subcontractor via their construction partner, BM, as early as possible on several key packages (see above). This is to ensure that we are able to optimise contractor involvement and the specialist supply chain as early as possible to engage with the design and the Board. The aim of this early engagement is to:

- Review designs to optimise buildability, minimise construction risk and ensure definition of interface solutions and requirements
- Securing absolute clarity of stakeholder requirements (particularly LUL, the City of London and NR) and ensuring that design solutions are developed that provide certainty of acceptance
- Evaluation of opportunities that result in savings to defined cost or mitigate delivery risk
- The approach to obtaining approvals by required dates, particularly at the start of works
- Managing critical interfaces during all phases of the works
- An ongoing strategy for full integration of system wide requirements into the design and delivery programme

### **B8.3 SUMMARY**

IHS Lothian is confident we have the correct blend of consortium partners that have a track record in delivering quality healthcare projects and operational services through our partner Brookfield Multiplex and BES FM. We have assembled a team of professionals who bring knowledge, expertise, and a passion for working to the highest standards.

Our commitment to you as Project Co. is to manage our team using the effective lines of communication, maintain the structures and systems in place and ensure we achieve the high standards you expect as a client. We will do this through continually managing, meeting and monitoring our collective performance to ensure we deliver.

The selection of the subcontractors already in place and future selection will be managed to ensure we bring the best in class to this project.

Overall, our promise is to manage all of the stages and situations professionally, collaboratively and efficiently to ensure we help the NHS Lothian Board deliver its vision and provides a safe, high quality hospital.

### Re-provision of RHSC & DCN at Little France

B.11 Acceptable organisational diagrams for each stage of the project

Final Tender – 13th January 2014

COMMERCIAL IN CONFIDENCE









**Figure 1. Contract finalisation snapshot** 

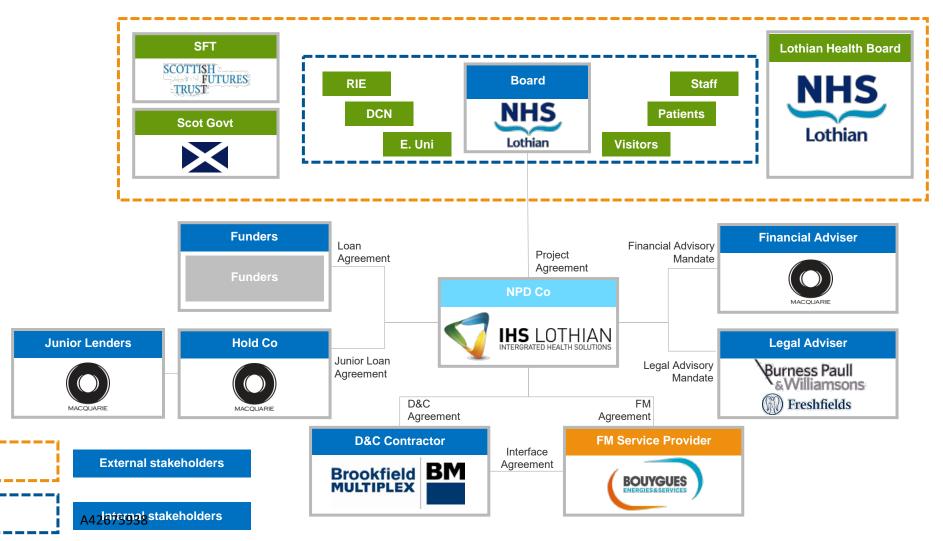
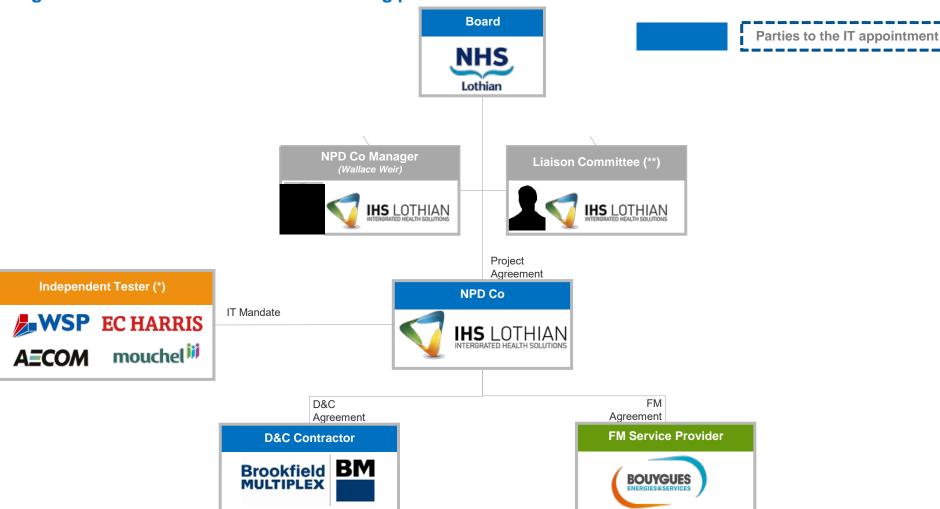






Figure 2. Construction and commissioning period



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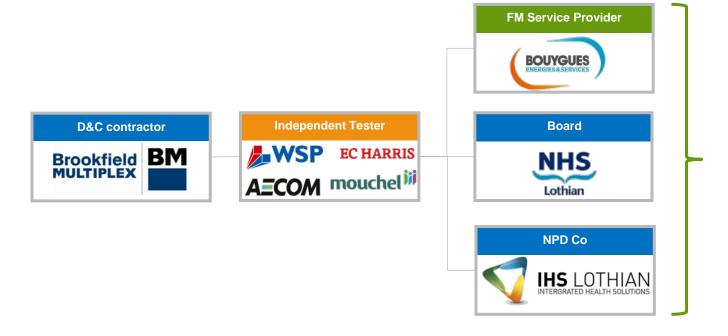
(\*\*) See next slide for further details on Liaison Committee

<sup>(\*)</sup> Appointment to be concluded. Shown firms are only for orientation.





Figure 3. Commissioning & Testing



Familiarisation +

On-site training





Figure 4. Operational period







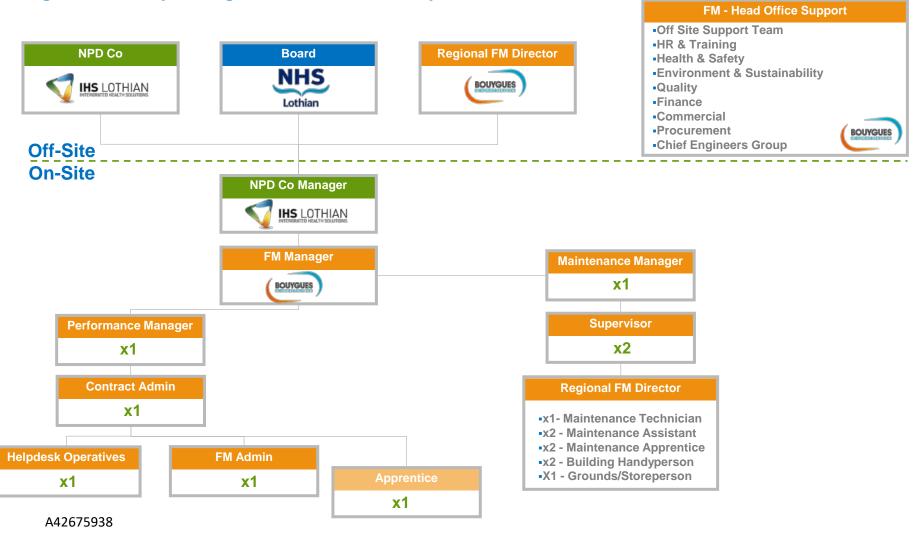








**Figure 5. Facility Management Service Delivery Structure** 



### IHS LOTHIAN CV

#### LIAISON COMMITTEE - JUNIOR DEBT REPRESENTATIVE







#### **MACQUARIE CAPITAL**

MARK BRADSHAW

Senior Managing Director

#### **Membership associations**

Solicitor of the Supreme Court of NSW

#### **Education**

- Bachelor of Laws, University of New South Wales (UNSW), Australia
- Bachelor of Construction (Property/ Engineering/Economics), (1st Class Honours) UNSW

#### Relevant working experience

Selected Macquarie PPP/PFI transactions include:

- £750m Leicester Hospital
- €150m Decentralisation Offices
- £650m Peterborough Hospital
- €100m Irish Schools Bundle 1
- €150m Irish Schools Bundle 2
- £125m Perth and Kinross Scottish Schools
- £160m Edinburgh Scottish Schools
- £600m Mersey Gateway
- £1bn Scottish PFI Road Program
- £350m A13 PPP UK
- €5bn ADIF Spanish High Speed Rail Program

- Over the last 14 years Mark has advised and worked on many public infrastructure projects, including sectors such as: major transport, health, education, defence and accompagation, utilities, energy, waste/water and property
- Mark is currently member of the Board of Director in several PPP operational projects

### IHS LOTHIAN CV

### LIAISON COMMITTEE - JUNIOR DEBT REPRESENTATIVE







#### MACQUARIE CAPITAL

#### **BRIAN SAUNDERS**

Vice President

#### **Membership associations**

- Member of the Chartered Institute of Building (ICIOB)
- Certificate in Insurance Practice with Insurance Institute of Ireland

#### **Education**

- Postgraduate Diploma in Project Management, Trinity College Dublin
- BSc Surveying, Construction Economics and Management, Dublin Institute of Technology
- Diploma Construction Technology, Dublin Institute of Technology

#### Relevant working experience

- £ Undisclosed, Aberdeen Western Peripheral Route, Scotland, Current
- £ Undisclosed Mersey Gateway Crossing, UK, Current
- € Undisclosed Third level Bundle 2, Ireland, 2011
- € Undisclosed National Concert Hall, Ireland, 2011
- £ Undisclosed Schools Bundle 3, Ireland 2011
- € 150m, Irish Schools Bundle 2, Ireland 2010 (In Operations)
- Undisclosed Motorway Service Areas Bundle 1, Ireland, 2010
- Undisclosed Decentralised Offices, Ireland, 2009
- € 100m, Irish Schools Bundle 1, Ireland 2009 (In Operations)
- Department of Education and Science PFI, 2008

- Extensive PPP/PFI expertise in UK and Ireland
- Recently involved in major UK PPP/PFI projects
- Member of the Board of Directors in the MPFI Irish Schools Bundles A42675938

## IHS LOTHIAN CV LIAISON COMMITTEE - D&C REPRESENTATIVE







#### **BROOKFIELD MULTIPLEX**

#### **JOHN BALLANTYNE**

Regional Director Scotland

#### **Membership associations**

Fellow of Royal Institution of Chartered Surveyors (FRICS)

#### Relevant working experience

Selected Brookfield transactions include:

- £575m New South Glasgow Hospital Project, Ongoing
- £193m Forth Valley PFI, 2011
- £91m Aberdeen Royal Infirmary HFS, 2010
- £35m Broadway 1 Glasgow, 2009
- £45m 141 Bothwell Street, 2009
- £136m Perth & Kinross Schools PFI, 2008
- £169m Edinburgh Schools PFI, 2007
- £400m Scottish Parliament, 2004
- £60m Museum of Scotland, 1999
- US\$180m CB1 San Francisco, 2002
- US\$165m 4 Seasons hotel & Tower Miami, 2003
- US\$45m Mary Brickell Village, 2006
- US\$98m Met 1 Miami, 2005

- John is well versed in the process of constructive negotiation. Driving through clear and concise communication to a non ambiguous conclusion of complex contractual and financial matters.
- Identification and management of high value complex project specific risks is an area where his experience has been relied on by Employers and Clients previous

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## IHS LOTHIAN CV

#### LIAISON COMMITTEE - D&C REPRESENTATIVE







#### **BROOKFIELD MULTIPLEX**

## PAUL SERKIS Commercial Director

#### **Membership associations**

Fellow of Royal Institution of Chartered Surveyors (FRICS)

#### Relevant working experience

- £575m New South Glasgow Hospital Project, Ongoing
- £347m Peterborough Hospitals PFI
- £1.1m Southend Hospital Refurbishment
- £200m Westminster & Chelsea Hospital
- £20m Enfield & Newham Schools PFI
- £25m Kirklees Schools PFI
- £25m Clacton Schools PFI
- £25m Leeds Primary Schools PFI
- £54m Merton Schools PFI
- £87m National Physics Laboratory PFI
- £550m The Pinnacle
- £26m NATO (Northwood Command Centre)
- £0.5m USAF Base, Ruislip
- £5.5m RAF High Wycombe
- £6m Tesco (Southend)

#### **Others**

Having held senior positions on the delivery of projects, this has allowed Paul to learn and bring that experience to the front end

### IHS LOTHIAN CV

#### LIAISON COMMITTEE - FM REPRESENTATIVE







#### **BOUYGUES ENERGY & SERVICES**

STEVE MCDONALD

Strategic Development Director

#### **Membership associations**

Member of BIFM (MBIFM)

#### **Education**

- BA (Hons) Politics & Philosophy
- MSC Information Management & Technology

#### Relevant working experience

The following PPP/PFI projects are examples of projects that he has played an active role in securing the projects as client, project sponsor/FM lead or in an advisory capacity:

- Mid Essex Hospital PFI Dec 2007
- North Middlesex University Hospital PFI Aug 2007
- Central Middlesex Hospital PFI 2003
- West Middlesex University Hospital PFI 2001
- Tower Hamlets BSF Jan 2009
- Waltham Forest BSF Oct 2007
- Lewisham Schools BSF Aug 2006
- Peterborough Schools BSF Aug 2006
- Barking Schools PFI 2004

- Extensive experience in PFI/PPP working in partnership with the client to achieve financial close, providing innovative solutions for issues such as retained estate
- Project Co Board Director and Liaison Committee: (BYWEST) West Middlesex University Hospital NHS Trust PFI, UK and BYCentral Central Middlesex Hospital BECaD PFI
- Board Director: Tower Hamlets Building Schools for the Future LEP, UK
- Project Co Board Director: Green Timbers Accommodation Project (RCMP) PPP, Vancouver Canada
- 🛮 🗗 🗗 🗗 🖟 🕳 🖟 Bouygues Energies & Services FM UK Ltd, Bouygues Energies & Services Infrastructure UK Ltd and Bouygues Energies & Services Canada

## IHS LOTHIAN CV NPDCO MANAGER







## IHS LOTHIAN - HCP WALLACE WEIR

NPDCo Manager

#### **Membership associations**

Registered General Nurse

#### Education

- Diploma in Management
- IOSH Safety for Senior Executives

#### Relevant working experience

#### Selected projects include:

- Hairmyres Hospital PFI, South Lanarkshire, Ongoing (Senior General Manager)
- Transform Schools PFI, North Lanarkshire, Ongoing (Senior General Manager)
- Pinnacle Schools PFI, Fife, Ongoing (Senior General Manager)
- Mid Essex Hospitals (Directorate Manager for Head & Neck Services, Acting General Manager for Surgery, Assistant General Manager for Critical Care & Surgery, Assistant General Manager for Development and Service Manager)
- Mid Essex Health Authority (Charge Nurse for General and Thoracic Medicine)
- Fife Health Board (Staff Nurse for General and Thoracic Medicine)

- Extensive experience in delivering complex healthcare projects across Scotland and the UK
- Understanding of the delivery of healthcare services both at a clinical level and also at a project delivery level
- HCP is successfully working together with Macquarie and Brookfield Multiplex on Peterborough PFI Hospital



# Re-provision of RHSC and DCN at Little France

Resource Paper

NHS Lothian March 14





## Re-provision of RHSC and DCN at Little France

Resource Paper

March 2014

**NHS** Lothian

56 Canaan Lane, Edinburgh, EH10 4SG

## Issue and revision record

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06	18.03.13	S.Farquharson	K.Falconer	F.McQuarrie	
07	07.05.13	M.Brown	L.Baird	F.McQuarrie	Updated due to staff changes.
08	06.03.14	S.Abercrombie	M.Brown	F.McQuarrie	Preferred Bidder Appointment

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## **Executive Summary**

The purpose of this paper is to provide a detailed account of all advisors involved in this project.

Please see the appended Organograms.

- 1) NHSL
- 2) NPD
- 3) Enabling Works

## 1. Roles and Responsibilities

#### 1.1 NHSL Project Team

Name and Title	Key Areas of Responsibility
<b>Lynn Allan</b> Project Accountant	<ul> <li>Full business case costs</li> <li>Ensure that all aspects of the project are fully accounted for, monitored and included in the NHSL long-term planning process.</li> <li>Interrogation of Financial Model</li> <li>Apply Accounting Standards</li> </ul>
Sorrel Cosens Project Manager, Procurement	<ul> <li>Lead on the full business case</li> <li>Procurement project management lead</li> <li>Lead for public and patient involvement in the project</li> <li>Supports the communications strategy</li> </ul>
Brian Currie Project Director	<ul> <li>Successful delivery of Project</li> <li>Lead procurement</li> <li>Lead Development Control Plan and Town Planning interface</li> <li>Lead corporate governance</li> <li>Consort interface</li> </ul>
Stuart Davidson Contracts Manager	<ul> <li>Lead FM contract development under NPD</li> <li>NPD and existing PFI contracts management</li> </ul>

Name and Title	Key Areas of Responsibility
lain Graham  Director of Capital  Planning and Projects	<ul> <li>Commercial and legal lead</li> <li>Lead on legal and commercial interfaces together with funding arrangements</li> <li>Link to the existing Project Agreement and operational issues arising.</li> </ul>
Fiona Halcrow Project Manager, Service	<ul> <li>Clinical input into design development.</li> <li>Clinical modelling</li> <li>Co-ordinates workforce planning</li> <li>Clinical service redesign</li> <li>Commissioning manager for clinical neurosciences</li> </ul>
Lauren Lynch Project Administrator	Senior Administrative support
Andrew MacDonald Project Manager, Enabling Works	<ul> <li>Project management of enabling works.</li> <li>TAWO's 156 – 161 (non NPD)</li> </ul>
Janice Mackenzie Clinical Project Director	<ul> <li>Lead on strategic clinical input into the Project</li> <li>Lead on design development, ensuring building is fit for purpose.</li> <li>Engagement with clinical staff and operational services</li> <li>Public and patient involvement in the project</li> <li>Commissioning manager for RHSC</li> <li>Clinical service redesign</li> </ul>
Margaret DiMascio Clinical Enabling Manager	Lead design development for clinical enabling projects in RIE     Programme and manage decant and commissioning     Clinical service redesign

Name and Title  Neil McLennan  Project Manager Capital	<ul> <li>Key Areas of Responsibility</li> <li>Supporting IHSL in the schedule of accommodation and room data sheets</li> <li>Equipment, working with HFS</li> <li>Clinical Enabling within RIE (non NPD)</li> </ul>
Linzi Ogden Administrative Secretary	Administrative Support
Moira Pringle Head of Property and Asset Management Finance	<ul> <li>Management of the NHSL Finance input into the funding competition and the Full Business Case</li> </ul>
<b>David Ridd</b> Communications Manag	<ul> <li>Patients, public, staff communications</li> <li>Stakeholder and media relations</li> <li>Managing and implementing key elements of communication strategy and policies.</li> </ul>
Jackie Sansbury Project Sponsor and Operational Lead	<ul> <li>Driving clinical service redesign.</li> <li>Management of Transition Process.</li> <li>Programme Commissioning Works.</li> <li>Decommissioning of existing sites.</li> <li>Support FM and contract development.</li> </ul>

### 1.2 Technical Advisers

## 1.2.2 Project Management Team – Mott MacDonald Ltd

Name and Title	Key Areas of Responsibility
Maureen Brown Lead Project Manager	<ul> <li>Project Communications</li> <li>Project Reporting</li> <li>Programme Review</li> <li>Arranging all project meetings and agreement of agendas</li> <li>Manage information flow from IHSL between client and all Advisors (including all submissions, queries etc.)</li> </ul>
Kolodziejczyk, Kamil K Assistant Project Manager	<ul> <li>Assisting with all Project Communications, reporting, project meetings, information management and system administrative tasks.</li> <li>Supporting the project support team with meeting invites, agendas, control tools, project directory and the project execution plan.</li> <li>Collate and manage all actions for project meetings</li> <li>Management of Project Information and Control Tools including Meeting Matrix, Project Directory, PEP and associated documents</li> </ul>
Scott Abercrombie Assistant Project Manager	<ul> <li>Collate and manage all actions for project meetings</li> <li>Management of Project Information and Control Tools including Meeting Matrix, Project Directory, PEP and associated documents</li> <li>Responsible for meeting invites, agendas and documentation for all bidders meetings</li> <li>Maintaining a clear audit trail for the project in terms of decisions and progress</li> <li>General tasks relating to supporting of the wider project team</li> </ul>

## 1.2.3 Technical Advisory Lead - Mott MacDonald Ltd

Name and Title	Key Areas of Responsibility
Richard Cantlay TA Director	<ul> <li>Overall responsibility for technical adviser input throughout the process from preferred bidder appointment to financial close.</li> <li>Member of the Core Project Team</li> <li>Attend meetings as required</li> <li>Allocate TA resources to the project</li> </ul>
Graeme Greer Lead TA	<ul> <li>Lead technical adviser input from preferred bidder appointment to financial close.</li> <li>Manage and coordinate the post preferred bidder process</li> <li>Attend all technical related meetings with IHSL.</li> <li>Record actions from technical break-out meetings when in attendance and feed to PM</li> <li>Manage the review and feedback of IHSL proposed technical solutions</li> <li>Liaison with client project team throughout development process to financial close</li> </ul>
David Stillie  Design and Construct  Work-Stream Lead	<ul> <li>Lead technical advisory input to the Design &amp; Construction elements of the dialogue process</li> <li>Attend relevant dialogue meetings / Feed actions back to TA</li> <li>Close out all issues in relation to (Design &amp; Construction issues) for financial close</li> </ul>
Charles Rayner Principal Aviation Planner	<ul> <li>Lead technical advisory input to the helipad elements of the design process</li> <li>Review and feedback of bidders approach to helipad through to financial close</li> <li>Review of Design &amp; Construction proposals at draft final tender</li> <li>Carry out evaluation of Design &amp; Construction proposals in final bid submissions</li> <li>Collation of helipad issues for the preferred bidder Close out all issues in relation to helipad for financial close</li> </ul>

Name and Title	Key Areas of Responsibility
Simon Kahn Technical Director - Acoustics	<ul> <li>Lead technical advisory input to the acoustics elements of the design process</li> <li>Review and feedback of bidders approach to acoustics through to financial close</li> <li>Review of Design &amp; Construction proposals at draft final tender</li> <li>Carry out evaluation of Design &amp; Construction proposals in final bid submissions</li> <li>Collation of acoustic issues for the preferred bidder</li> <li>Close out all issues in relation to acoustic for financial close</li> </ul>

#### 1.2.4 Mechanical and Electrical - Mott MacDonald Ltd

Name and Title	Key Areas of Responsibility
Colin Macrae Design and Construct Mechanical and Electrical Lead and Electrical Engineer	<ul> <li>Lead technical advisory input to the Mechanical and Electrical elements of the post preferred bidder stage</li> <li>Attend relevant dialogue meetings / Feed actions back to TA</li> <li>Review in (Mechanical &amp; Electrical proposals) post preferred bidder stage</li> <li>Carry out evaluation of (Mechanical &amp; Electrical proposals) in post preferred bidder stage</li> <li>Close out all issues in relation to (Mechanical &amp; Electrical issues) for financial close</li> </ul>

## 1.2.5 Civil / Structural Engineering - Mott MacDonald Ltd

Name and Title	Key Areas of Responsibility
Bryan MacKay Design and Construct Civil and Structural Engineer	<ul> <li>Lead technical advisory input to the Civil / Structural elements of the design process</li> <li>Attend relevant dialogue meetings / Feed actions back to TA</li> <li>Review and feedback of Bidders (Civil / Structural proposals) through to financial close</li> <li>Review in (Civil / Structural proposals)</li> <li>Carry out evaluation of (Civil / Structural proposals) in final bid submissions</li> <li>Close out all issues in relation to (Civil / Structural issues) for financial close</li> </ul>

# 1.2.6 Facilities Management / Payment Mechanism - Mott MacDonald Ltd

Name and Title	Key Areas of Responsibility
Carol Thorburn Facilities Management Consultant	<ul> <li>Lead technical advisory input to the FM elements of the design process</li> <li>Attend relevant dialogue meetings / Feed actions back to TA</li> <li>Carry out evaluation of (FM proposals) of preferred bidder</li> <li>Collation of FM issues</li> <li>Close out all issues in relation to (FM issues) for financial close</li> </ul>
Simon Alderson Facilities Management Consultant	<ul> <li>Lead technical advisory input to the Payment Mechanism development</li> <li>Attend relevant dialogue meetings / Feed actions back to TA</li> <li>Development of Payment Mechanism model</li> <li>Lead on Gross Service Unit table</li> <li>Calibration of Payment Mechanism</li> <li>Review and feedback of Bidders (Payment Mechanism proposals) through to financial close</li> <li>Carry out evaluation of (Payment Mechanism proposals) to financial close</li> <li>Collation of Payment Mechanism issues for the preferred bidder</li> </ul>

## 1.3 Cost Consultants – Thomson Gray Partnership

Name and Tit	e Key Areas of Responsibility
James Gibson Director	<ul> <li>Lead technical advisory input to the Cost elements of the development process.</li> <li>Attend relevant dialogue meetings / Feed actions back to TA</li> <li>Review and feedback of Cost proposals</li> <li>Evaluation of Cost elements of preferred bidder proposals</li> </ul>

#### 1.4 CDMC - Turner Townsend

Key Areas of Responsibility
Advice on CDMC policies and governance
Lead technical advisory input to the CDMC elements
to financial close
Attend relevant dialogue meetings / Feed actions
back to PM
Review and feedback of Bidders CDMC proposals
<ul><li>Evaluation of CDMC elements preferred bidders</li></ul>
proposals

## 1.5 Financial Advisers – Ernst and Young

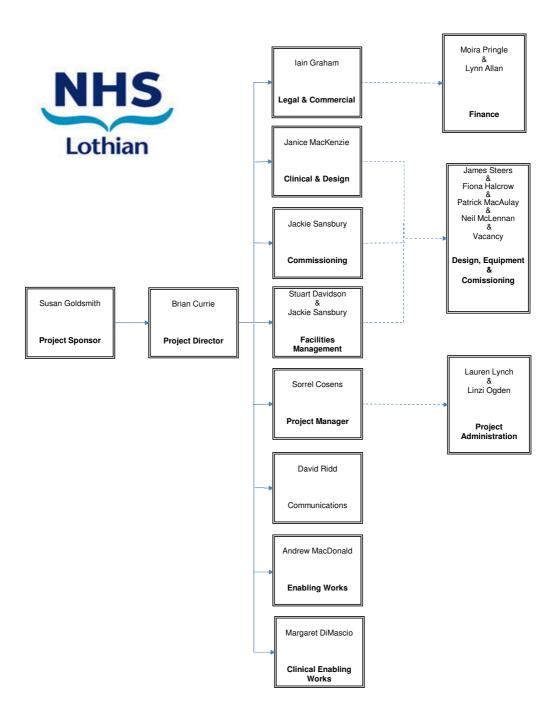
Name and Title	Kay Arasa of Baananaihility
Michael Pryor Project Manager	<ul> <li>Key Areas of Responsibility</li> <li>Act as the day to day contact for financial issues.</li> <li>Attend meetings with NHSL Project Director and Finance team</li> <li>Represent EY at any meetings with SFT</li> <li>Act as primary liaison with other advisers</li> <li>Manage team and allocate resource</li> <li>Lead input to dialogue</li> </ul>
Lindsey Crawford Core Team - Adviser	<ul> <li>Record actions from break-out project meetings when in attendance and feed to PM</li> <li>Carry out financial modelling</li> <li>Prepare financial sections of the business case</li> <li>Drafting of financial inserts to procurement documentation</li> <li>Undertake financial evaluation at financial close</li> <li>Provide support and liaison as required</li> <li>Calibration of payment mechanism in conjunction with technical advisers</li> </ul>
Lucy MacArthur Core Team - Adviser	<ul> <li>Carry out financial modelling</li> <li>Prepare financial sections of the business case</li> <li>Drafting of financial inserts to procurement documentation</li> <li>Undertake financial evaluation at financial close</li> <li>Provide support and liaison as required</li> <li>Calibration of payment mechanism in conjunction with technical advisers</li> </ul>

## 1.6 Legal Advisers – MacRoberts LLP

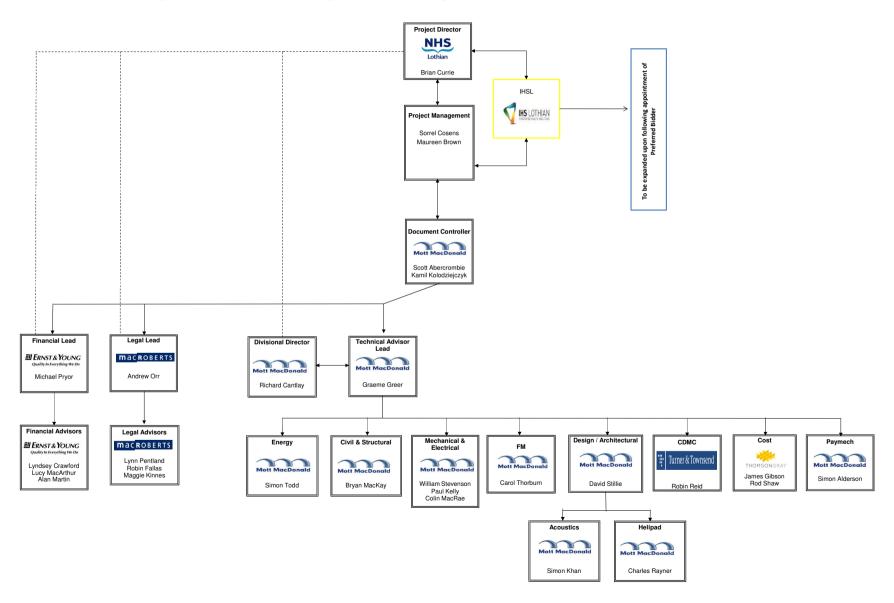
Name and Title	Key Areas of Responsibility
Andrew Orr Lead Partner	<ul> <li>Overall responsibility for legal advice throughout the procurement process to financial close</li> <li>Oversee all legal advice and input through dialogue</li> <li>Attend relevant dialogue meetings</li> <li>Oversee, review and feedback on IHSL s legal comments</li> <li>Lead evaluation of legal elements of bids</li> <li>Record actions from break-out project meetings when in attendance and feed to PM</li> </ul>
Maggie Kinnes Senior Associate	<ul> <li>Lead advice on construction aspects of the procurement</li> <li>Advice on construction interface with RIE</li> <li>Advice on enabling works for the procurement</li> <li>Attend relevant dialogue meetings</li> <li>Input for evaluation of bids</li> </ul>
Lynn Pentland Senior Associate	<ul> <li>Advice on project agreement</li> <li>General legal advice through to financial close.</li> <li>Attend relevant project meetings</li> <li>Review IHSL s legal comments</li> <li>Record actions from break-out project meetings when in attendance and feed to PM</li> </ul>
Robin Fallas Associate	<ul> <li>Advice on Public Procurement aspects of the procurement</li> <li>Advice on governance</li> <li>Advice on evaluation</li> </ul>

# 2.0 Organograms

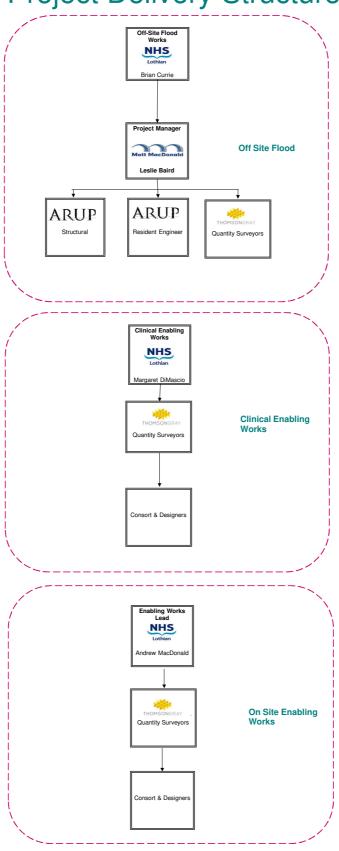
# RHSC + DCN - Little France NHSL Project Delivery Structure



# RHSC + DCN - Little France NPD Project Partners Project Delivery Structure



RHSC + DCN - Little France Enabling Works Project Delivery Structure



Page 444

**Archived:** 16 March 2022 14:13:20

From: Paul Serkis

**Mail received time:** Tue, 15 Apr 2014 08:44:25

**Sent:** Tue, 15 Apr 2014 08:44:09

To:

Subject: RHSC & DCN: Project Delivery Structure: Org Chart Rev 6

Sensitivity: Normal **Attachments:** 

Project Delivery Structure 14-04-14 Rev6.xls

Dear all

Please find attached PDS Org chart Rev 6 updated in accordance with the PDG meeting yesterday.

Kind regards

Paul

Paul Serkis FRICS

Commercial Director - PPP



**Brookfield Multiplex Europe** 

99 Bishopsgate, 2nd Floor

London, EC2M 3XD, United Kingdom

W w w w .brookfieldmultiplex.com

We have moved! Our new address is 99 Bishopsgate, 2nd Floor, London EC2M 3XD. Kindly update your address books accordingly.

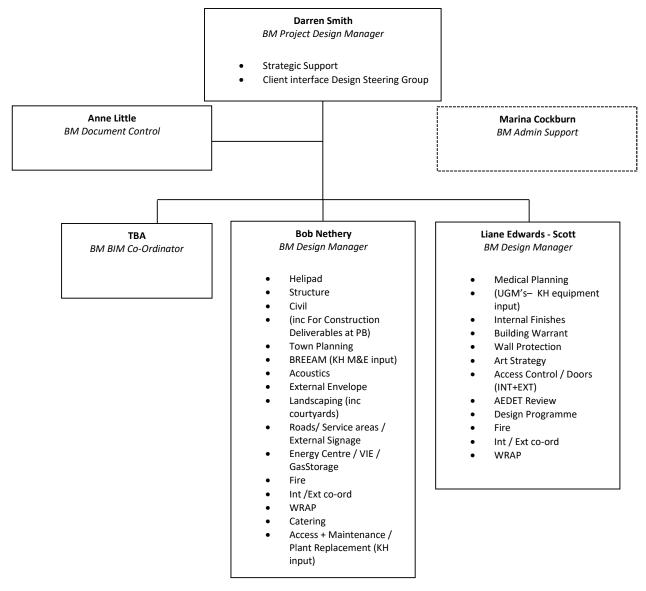
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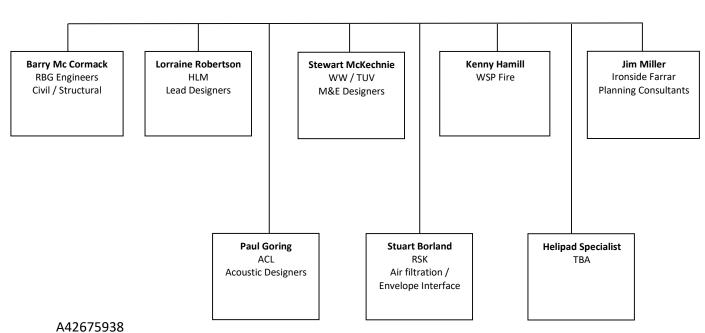
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#### RSCH & DCN (PB): Design Org Chart



#### Consultants



# **SCHEDULE PART 6** (CONSTRUCTION MATTERS)

# **SECTION 4** (PROJECT CO'S PROPOSALS)

# ITEM 1 (PROJECT CO'S PROPOSALS – CONTENT)

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	1.2	COMMUNICATION	2
	1.3	KEY ROLES AND RESPONSIBILITIES OF PROJECT CO	3
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#### 1.0 PROJECT CO MANAGEMENT

## 1.1 Working in Partnership

Project Co is confident it has the correct blend of consortium partners that have a track record in delivering quality healthcare projects and operational services through our partners Brookfield Multiplex Construction Europe Limited (the "Contractor") and Bouygues E&S FM UK Limited (the "Service Provider"). We have assembled a team of professionals who bring knowledge, expertise and a passion for working to the highest standards. The selection of subcontractors already in place and subsequent future selection will be managed to ensure we bring the best in class to this project.

Our commitment to the Board as Project Co is to manage our team through effective lines of communication, maintaining appropriate structures and systems and ensuring we achieve the high standards you expect as our client. We will do this through continually monitoring, reviewing and managing our collective performance.

The performance of the principal sub-contractors (the Contractor and the Service Provider) will be managed by Project Co through the Construction Contract and the Service Contract. Project Co acting as the focal point of contact will interface with the Board. This structure has been in place through the dialogue, tendering and preferred bidder stages and will remain so through to the Expiry Date.

The organisational management and communication structure chart (below) is included to demonstrate the links between the parties and how we will manage the activities of the principal subcontractors. We will also ensure that the provision of services post completion will be delivered to the same high standard. The primary aim is to ensure minimal disruption to ongoing operations on and around the Campus Site which will be facilitated by our active participation in the Little France Campus Working Group.

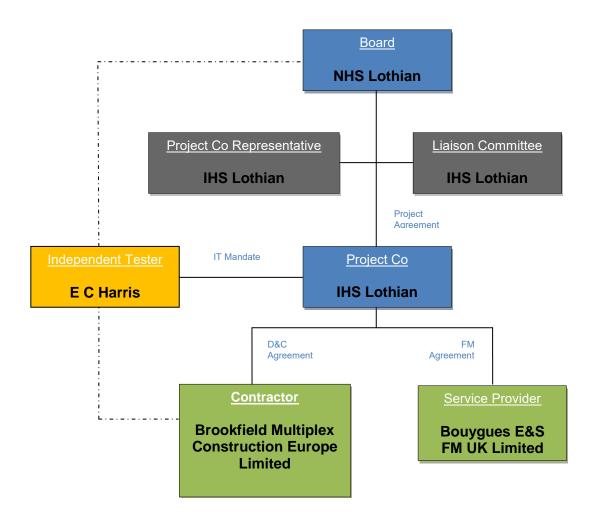
Our strategy for the project management of the Construction Phase and Operational Phase has been developed considering our experience across a number of complex healthcare projects including Peterborough Hospital PFI and the Glasgow Southern General Hospital.

From Financial Close the day to day operation of Project Co will be delivered under a management services agreement between Project Co and HCP Social Infrastructure ("**HCP**"), which are confirmed as the initial incumbent. HCP shall bring significant experience in the day to day operational management of hospitals, with over 21 public private partnership ("**PPP**") hospitals under its stewardship.

Overall, Project Co's commitment is to manage all stages of the Project professionally, efficiently and in partnership, to help ensure the Board delivers its vision on this Project.



#### **Organisational / Communication Structure**



#### 1.2 Communication

Project Co understands that communication and collaboration are critical to the success of the Project. From the outset of the dialogue process we have been committed to this and have demonstrated an open book approach to delivering the Project. Project Co will continue to work collaboratively to ensure the Board's requirements are met and we will strive to exceed these requirements.

While formal lines of communication exist within the Project structure, Project Co believe being available and open to dialogue through various levels of the respective teams will ensure smooth running of the process in order to better achieve the Board's desired goals and outcomes.

Project Co's Representative will be the key point of contact for the Board and will ensure the effective management of the activities of the Contractor and the Service Provider during both the Construction Phase and Operational Phase of the Project. Project Co's Representative will facilitate a schedule of meetings to service the requirements of the Project Agreement, the Board and the general progress of the Project. The frequency of meetings will vary throughout the term.



The initial meeting schedules are set out below;

#### **Construction Phase**

Meeting type Initial Frequency

Little France Campus Working Group Monthly
Construction progress / site meeting Monthly
Liaison committee meetings Quarterly
Third party stakeholders liaison meetings As required

Site safety meetings Weekly
Other meetings As scheduled

Informal communication As required

#### **Operational Phase**

Meeting type Initial Frequency

Little France Campus Working Group Monthly
Operational Service / site meeting Monthly
Liaison committee meetings Quarterly
Third party stakeholders liaison meetings As required

Site safety meetings Weekly
Other meetings As scheduled

Informal communication As required

## 1.3 Key Roles and Responsibilities of Project Co

#### **Project Co's Board**

Project Co's board brings a wealth of experience in managing healthcare PPP type projects. The members of the board will have experience of serving on other healthcare project boards and with this knowledge, bring a detailed level of understanding to the Project Co consortium. The Project Co board is the decision making entity and reflects the equity structure. The Project Co board composition is five directors nominated by the equity holders plus the B director as defined in the Articles of Association. Other attendees will include Project Co's Representative and the Project Co finance manager / company secretary.

Macquarie, as principal equity investor, will appoint as directors to the Project Co board senior representatives (managing director / vice president level or equivalents) with healthcare and PPP board experience.



#### Project Co's Liaison Committee

In addition to the Project Co board Project Co has selected a core team of key members from the consortium to sit as the Project Co liaison committee to ensure support, knowledge and experience is provided for the smooth operation of the Project through each stage. The composition of this liaison committee will include;

- 2 Project Co directors, and
- Up to the Actual Completion Date, 2 directors from the Contractor who will possess a wealth of healthcare and PPP experience, and
- 1 director from the Service Provider this will apply from the Commencement Date and ensures a focus by the consortium on the Operational Phase of the Project throughout design development and Construction Phase.

#### Project Co's Representative

Project Co's Representative will be a senior individual within the infrastructure market and possesses knowledge of the PPP industry together with experience in healthcare projects. Project Co's initial appointee, which shall be Wallace Weir, in fulfilling this role brings an understanding of the importance of the operational aspects of hospitals as it is key to delivering a successful Construction Phase while ensuring no disruption to the RIE Facilities or other parties on or adjacent to the Site and/or Campus Site.

As noted above, HCP has been appointed as Project Co's Representative from Financial Close for an initial period of five years. Wallace Weir will formally take up post of Project Co's Representative from Financial Close. Wallace has been working as part of the team supporting the consortium activity during the preferred bidder period. Project Co considers this appointment to be fundamental to the Project, working in partnership with the Board to ensure its needs and requirements are achieved.

Project Co will also subcontract the financial management services for the Project. In the initial term this will be provided by HCP with an experienced support team consisting of a finance manager, management accountant and finance assistant. HCP has a strong track record of delivering integrated financial and operational management and will implement robust financial systems and control procedures from the outset. HCP's finance team will deliver consistent, timely and informative management reporting in accordance with business needs and contractual requirements which will cover but not be limited to financial modelling, management accounting and reporting, budgeting, company secretarial services and treasury and cash management.



#### **Project Content** 2.0

The contents of Project Co's Proposals comprise sections 4.1 to 4.32 inclusive as set out in table 1 below:

Table 1: Project Co's Proposals- content list

Section	Title	
4.1	Project Overview	
4.2	Design Management	
4.3	Construction Methodology	
4.4	Architecture and Landscaping	
4.5	Interior design and wayfinding	
4.6	Art strategy	
4.7	Adaptability, flexibility and expansion strategy	
4.8	Civil and structural engineering	
4.9	Mechanical and electrical engineering	
4.10	Energy model and sustainability	
4.11	BREEAM	
4.12	Fire engineering strategy	
4.13	Acoustic strategy	
4.14	ICT strategy	
4.15	Vertical transportation strategy	
4.16	Commissioning strategy	
4.17	Access control strategy	
4.18	Security strategy	
4.19	Environmental plan and waste management strategy	
4.20	Quality management strategy	
4.21	Equipment strategy	
4.22	Not Used	
4.23	Specifications	

4.24	Schedule of design drawings
4.25	Operational design considerations
4.26	Helipad strategy
4.27	Not Used
4.28	Health and Safety
4.29	Not Used
4.30	Partnership and collaborative working
4.31	BIM
4.32	Schedule of Derogations







Construction Phase Project Execution Plan

April 2015

**NHS** Lothian



Construction Phase Project Execution Plan

April 2015

**NHS** Lothian

XXX

Construction Phase Project Execution Plan



# Issue and revision record

RevisionDateOriginatorCheckerApproverDescription014/05/15K GordonM BrownG GreerWork In Progress

#### Information Class: Standard

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Construction Phase Project Execution Plan



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Printing\_

RDD Processes \_\_\_

5.3.2

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Construction Phase Project Execution Plan



# **Executive Summary**

This Project Execution Plan (PEP) is intended to impart to all parties involved in the project a clear understanding of how they interact with each other, and sets out the governing strategy, organisation, control procedures and roles and responsibilities for the project. The document provides a concise introduction to the project for new team members in terms of how the project will be delivered.

It is intended that this document will be a working document, amended and further developed during the progression of the project, with revisions issued as appropriate. Mott MacDonald Ltd (MML) will be responsible for developing the document with input from the various parties of the project.

All parties involved in or associated with the project are requested to comply with the contents of this PEP. Any issues which may result in necessary amendments, amplifications or improvements to practices or procedures contained herein should be raised for discussion with all parties.



## Introduction

#### 1.1 **Project Name**

The name of this project is Re-provision of RHSC and DCN at Little France, and is abbreviated to RHSC + DCN - Little France.

#### 1.2 **Project Background**

The NHSL Property and Infrastructure Strategy for 2011-15 recognised that the RHSC and DCN require significant modernisation to ensure an appropriate environment for the provision of high-quality paediatric and neuroscience services. Physical building and site constraints, together with practical phasing difficulties, limited the ability to achieve such modernisation in a successful and cost effective manner on the current respective sites.

The re-provision of the Royal Hospital for Sick Children and Department of Clinical Neurosciences, within a combined facility at Little France, is a key part of the NHSL's strategic capital investment programme, ensuring the safest possible hospital care for children and will deliver this national clinical strategy by colocating adult and paediatric neurosurgery on the same hospital site. The new building will be located alongside the RIE on the Little France site.

NHSL has procured the project through the Scottish Government Non Profit Distributing (NPD) model. The project achieved financial close on 13th Feb 2015 and construction of the new facility commenced on the 16th Feb 2015. The key activities in this stage will include; the RDD review, the completion of the design and construction of the new hospital facility.

#### 1.3 **The Team**

#### 1.3.1 **The Team Organograms**

The Client has contracted Advisers to support the Project Delivery in the following way:



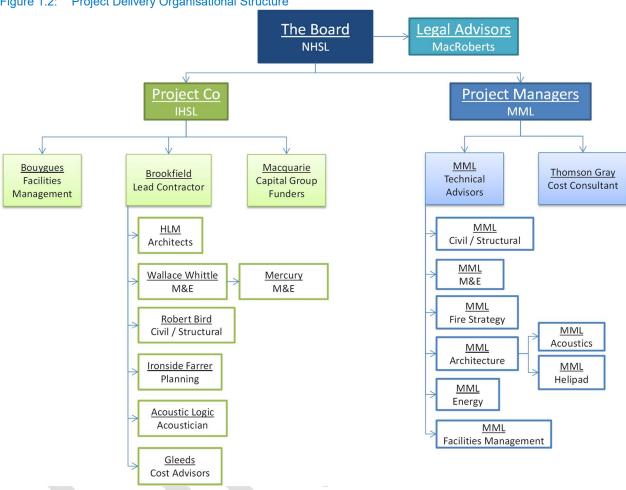
Figure 1.1: NHSL and Advisors Structure



The Project Delivery Organisational Structure diagram sets out the structure of the team, identifying the key roles included in the construction phase.



Figure 1.2: Project Delivery Organisational Structure



#### The Team Roles and Responsibilities 1.3.2

#### Employer – Lothian Health Board (known as NHSL) 1.3.2.1

NHSL is responsible for providing health and treatment services for the population of the Edinburgh and the Lothian's. NHSL is the Employer for the Project.

The Clinical Management Teams (CMT) have operational management responsibility for children's services and DCN, and as part of this, are key players in the RHSC + DCN - Little France project.

Construction Phase Project Execution Plan



#### 1.3.2.2 Mott MacDonald Limited

Mott MacDonald Limited has been appointed as the lead consultant and will deliver the following services:

- Project Management services;
- Lead Strategic advice;
- Facilities Management advice;
- Design and Construction advice, including:
  - Architecture
  - Mechanical and Electrical
  - Civil Structures
  - Helipad design advice
  - Acoustic Design;
- Fire Strategy advice;
- Energy.

#### 1.3.2.3 Thomson Gray

Thomson Gray has been appointed as a sub-consultant to Mott MacDonald Limited and will continue to deliver the following services:

- Cost Advisory services (excluding Facilities Management);
- Whole Life Costing.

#### 1.3.2.4 Project Co (Known as IHSL)

IHSL is a consortium built up of a construction firm (Brookfield), architect (HLMAD), Capital Finance Group (Macquarie) and Facilities Managers (Bouygeus). They have been appointed as the Lead Contractor and will deliver the design and construction of the new facility and provide facilities management and maintenance during the contracted 25 year operational period.

IHSL will also take on the role of CDM Co-ordinator to provide the client with a key project adviser in respect of construction health and safety risk management matters.

#### 1.3.2.5 Legal Advisers – MacRoberts LLP

The Legal Adviser was engaged to provide Legal Services to NHSL in connection with the RHSC + DCN – Little France Project, including in relation to the procurement stage of the Project, post-contract award and operational issues as well as site and project-specific issues.

#### 1.3.2.6 Independent Tester

The Independent Tester will undertake all work necessary to permit the issue of certificate(s) of practical completion, commissioning completion certificate(S) and snagging notice(s) in accordance with the Project agreement, Schedule Part 13. They shall be responsible for monitoring the works carried out by Project CO and reporting to the Board.

The Independent Testers include:

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- WSP UK
- **EC** Harris
- Aecom
- Mouchel



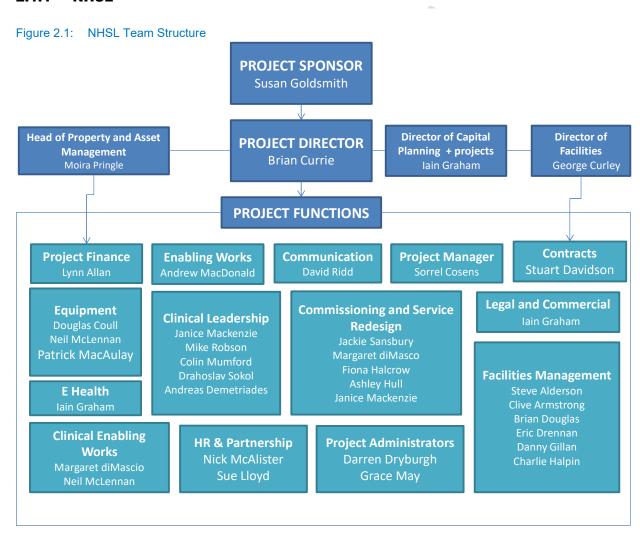


# 2 Roles and Responsibilities

### 2.1 Organisational Organograms

The following organograms have been provided to illustrate the team members in NHSL and MML. Pen Profiles for each of the key team members, highlighting their specific role and responsibilities, are provided in Appendix B.

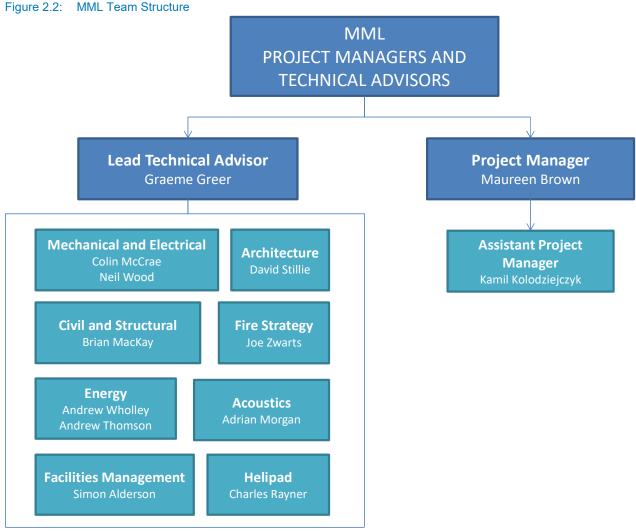
#### 2.1.1 NHSL



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#### **Mott MacDonald Limited** 2.1.2



Source: Insert source text here



# 3 Communication

#### 3.1 Aconex

The project utilises Aconex as a channel for communication and storage of project documents and for all contract administration. Aconex is the management tool for the following procedures/protocols:

- Design Management and storage;
- Risk Register;
- Data Room;
- Collation of Board policies and reference documents;
- Procurement and Contract documents;
- Transmittals: and
- RFIs.

#### 3.1.1 Aconex Administration Roles & Responsibilities:

Each project has users carrying out the following admin roles:

- Project Information Coordinator (PIC) The PICs are responsible for requesting new companies and adding new users to the project and amending user rights accordingly. Any changes to the configuration of Aconex must be authorised by a PIC. On this Project the PIC is Sorrel Cosens;
- Company Administrator (CA) At least one user per company should be nominated to be the CA for that company. This person can create new users for their company and edit existing user details and the rights of their company users. This is normally the user who attends the initial BIW training. This user will also be able to train other users within their own companies in the basic areas of the system. Company Administrators are as per the table below:

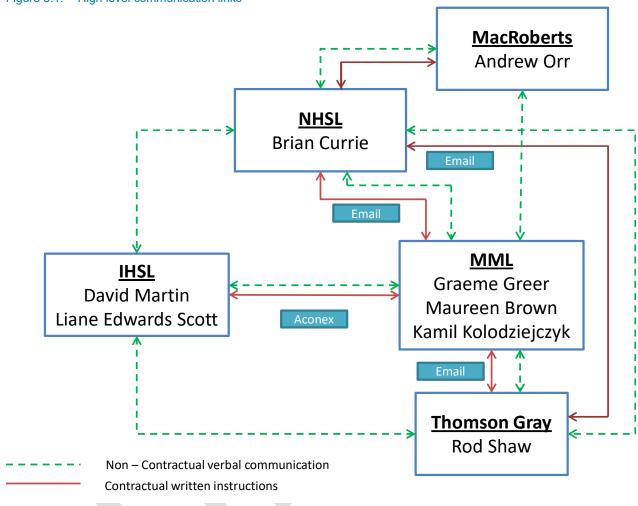
Table 3.1: Company Administrators

1 2	
COMPANY	ADMINISTRATORS
NHS Lothian	TBC
Mott MacDonald	Maureen Brown / Kamil Kolodziejczyk
Brookfield	Anne Little
Thomson Gray	Rod Shaw
IHSL	Wallace Weir



#### 3.2 Communication Links

Figure 3.1: High level communication links



3.3 Meetings

Waiting for information from Wallace.

#### 3.3.1 Work-streams

To assist with management of the different elements of the project, the project has been split up into the following work-streams:

Project Management Executive



- Design & Construction, including M&E and Civil and Structures;
- Facilities Management;
- Commercial Services;
- Equipment;
- Clinical Support (User Groups);

The objective of work-streams is to encourage delivery teams to manage themselves in the most appropriate way. Work-stream over-views are summarised below.

Table 3.2: Work-streams

abic J.Z. Work-streams		
Work-stream	Over-view	
Project Management Executive (PME)	The PME comprises the Project Director, the Commission Director and Lead Project Manager.	
	PME will liaise with all the work-streams to monitor progress and ensure the project is proceeding appropriately. The Project Director will act as the filter for all Technical Advisor queries to the NHSL Project Team.	
	An Action Schedule for the PME meeting is already being used during the meetings to ensure that all key actions are managed and tracked through to completion.	
Design & Construct	The project team will assist in the evaluation of the RDD packs submitted by IHSL. The team will advise on issues surrounding the proposed design and check for compliance with current standards and regulations and Financial Close documents.	
Facilities Management	The FM work-stream shall assist in the evaluation of the RDD packs submitted by IHSL.	
Commercial Services	TBC	
Equipment	A dedicated equipment work-stream has been identified to be responsible for determining the facility-wide equipment requirements. The Equipment work-stream shall assist in the evaluation of the RDD packs submitted by IHSL	
Clinical Support	The NHSL Clinical Project Team is responsible for ensuring that design and planning reflect clinical operational need and best practice. They must ensure that an efficient, practical, functional facility is achieved through the construction phase.	
Commissioning	The Board head of commissioning is responsible for the overall NHS commissioning and service migrations to the Facility and decommissioning of the old facilities. This will include aligning familiarisation and commissioning of the building, the equipment and the services to ensure the building is ready for occupation.	

#### 3.3.2 **Meeting Matrix**

Waiting for information from Wallace.

### Re-Provision of RHSC and DCN at Little France

Construction Phase Project Execution Plan



### 3.4 Project Directory

A Project Contact Directory is available on Aconex and is designed to be accessible to all parties to find the relevant persons to contact where necessary. The document is maintained by the Aconex Administrator for each organisation. Any updates required to the MML directory should be directed to Maureen Brown / Kamil Kolodziejczyk and any change to the NHSL directory should be directed to Sorrel Cosens.

IHSL has also produced a Project Directory available in Appendix C.





### 4 Construction Phase

#### 4.1 Introduction

#### 4.2 Programme

### 4.2.1 Construction Programme

Brookfield is responsible for monitoring and updating the construction programme. The high level construction programme is available in Appendix D.

IHSL is under no contractual obligation to re-issue the construction programme unless a change request from either NHSL or IHSL impacts the programme. However, updates from IHSL will be provided to NHSL during the monthly construction meeting.

#### 4.2.1.1 Key Milestones

Table 4.1 outlines the key construction milestones as detailed by the construction programme in Appendix D.

Table 4.1: Key Construction Milestones

Milestone:	Date:
Site Possession	16/02/2015
Decommission De-watering Systems	13/01/2016
IHSL handover completed hospital	03/07/2017

### 4.2.2 Commissioning Programme

The Outline Commissioning Programme was last revised at Financial Close and can be viewed in Appendix E. A Final Commissioning Programme is to be prepared by NHSL 24 weeks before the anticipated completion date.

Table 4.2: Key Commissioning Milestones

Milestone	Date
Project Co give Board 12 month notice of installation of Group 2B equipment	01/04/2016
Give notice to IT and Board of commencement of Pre- Commissioning	16/08/2016
Board Provide Project Co with final Commissioning Programme (6	03/10/2016



Milestone	Date
months prior to PC)	
Project Co give Board notice of Delivery of Group 2A equipment in accordance with Sch Pt 11 2.5	07/10/2016
Project Co give Board notice of installation of Group 2B equipment in accordance with Sch Pt 11 3.5	27/02/2017
Project Co give notice to Board to commence pre-completion commissioning	06/03/2017
Close down Zone A	13/03/2017
Project Co give notice to IT and Board of proposed completion date (3 Months prior PC Clause 17.5)	03/04/2017
IT/Data Network Connection Live	08/05/2017
Close down Zone C	29/05/2017
Completion of commissioning	05/06/2017
Close down Zone B	12/06/2017
Target Project Completion and Handover Date	03/07/2017
Provide Final Draft O&M manuals 10 days after completion date (Clause 18.5.2)	17/07/2017
Board Transfer of Patients as per Final Commissioning Programme	25/09/2017



### **Construction Phase Procedures**

#### 5.1 **Management Trackers**

Mott MacDonald are using a number of spreadsheet trackers to aid in the management of incoming and outgoing information, comments and requests for information during the construction phase. The list of current trackers is outlined in Table 5.1.

Table 5.1: **Management Trackers** 

Tracker Name	Brief Description
Change Control Captures all internal Board proposed changes and Change requests.	
RDD Tracker	Records all incoming RDD Packs from IHSL, the dates the packs are issued to the Project Team, the date in which NHSL needs to respond to IHSL and the status NHSL are assigning to the drawing.
PG RDD Tracker	Records all incoming PG Packs from IHSL, the dates the packs are issued to the User Groups, the date in which NHSL needs to respond to IHSL and the status NHSL are assigning to the drawing.
User Group Meeting Tracker	Records the time and date of all user group meetings, including who has confirmed attendance and the address each pack is to be delivered to.
Request for Information	Records all requests for information from NHSL to IHSL.
Design Issues  Captures all comments from the Board RDD meetings that are deemed 'not releval IHSL and, therefore, will be ignored if recorded onto the RDD documents.	
Hobbs printing	Keeps track of all the current printing orders.

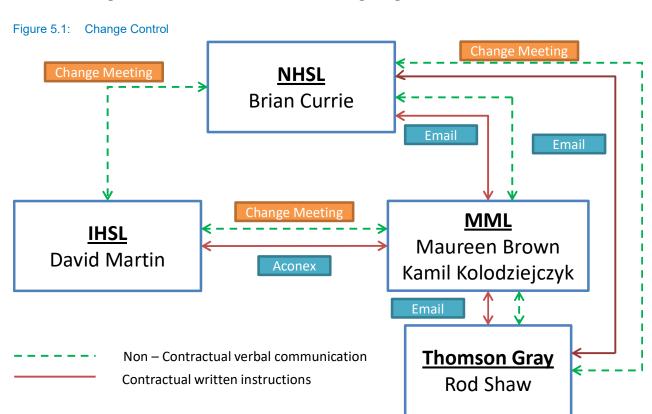
#### 5.2 **Change Control**

NHSL, Mott MacDonald Limited and their sub-consultants will follow the change control procedures in accordance with the Project Agreement Schedule Part 16. MML are keeping a tracker up to date with all Board Proposed changes and submitted Board Changes. An example of the tracker is available in Appendix F.

It should be noted that the tracker is a live document and maintained and updated by MML. The tracker is saved in MML internal document storage here.



#### 5.2.1 Change Control Communication Link Organogram



Source: Insert source text here

### 5.2.2 Between the NHSL and IHSL

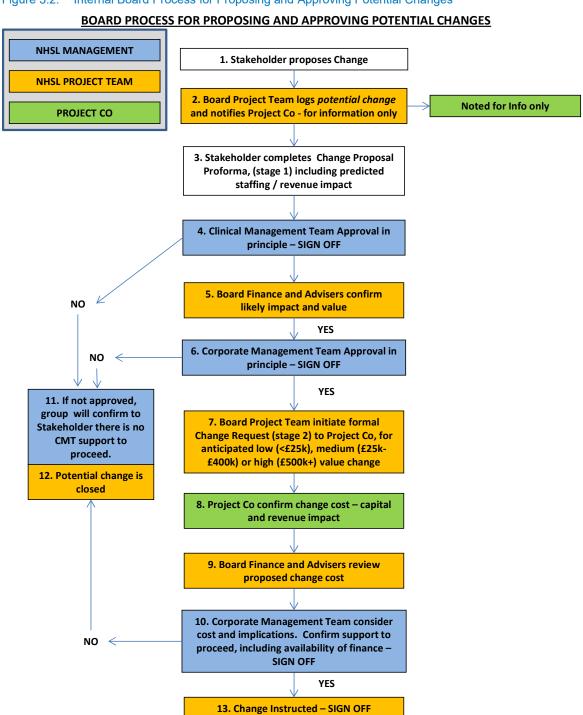
### 5.2.2.1 Stage 1: Board Process for Proposing and Approving Potential Changes

The following flowchart illustrates the stages of the process the Board needs to go through when proposing and approving potential changes internally, prior to producing a Board Change Notice to MML for issuing to Project Co.

An example of the Stage 1 Change Proposal pro-forma is available in Appendix G.



Figure 5.2: Internal Board Process for Proposing and Approving Potential Changes



### Re-Provision of RHSC and DCN at Little France

Construction Phase Project Execution Plan



#### 5.2.2.2 Stage 2: Board Changes

Following internal approval of a change during the Stage 1 process the Board must submit a Board Change Notice to Project Co in accordance with Schedule Part 16 Section 2 (Low), Section 3 (Medium) and Section 4 (High). MML will be responsible for document control and issuing all Board Change Notices to Project Co using the Pro-forma included in Appendix H.

The following flowcharts illustrate the procedural stages of a Low, Medium and High Value Change:





Figure 5.3: Low Value Change

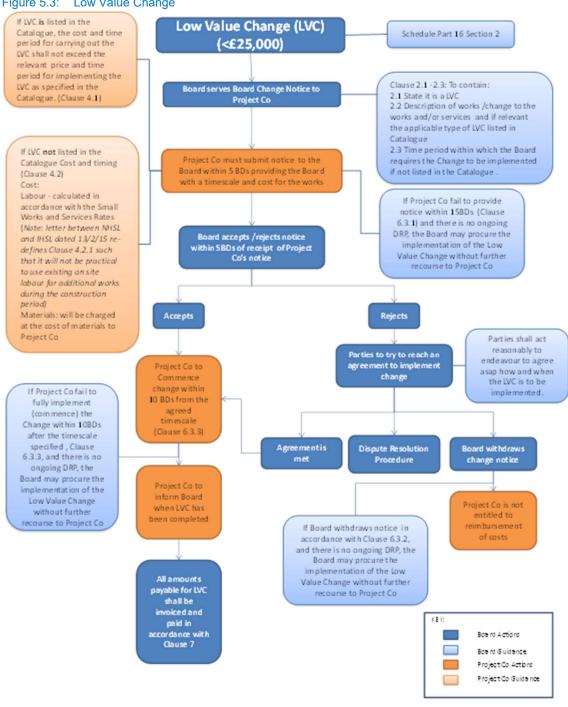




Figure 5.4: Medium Value Change

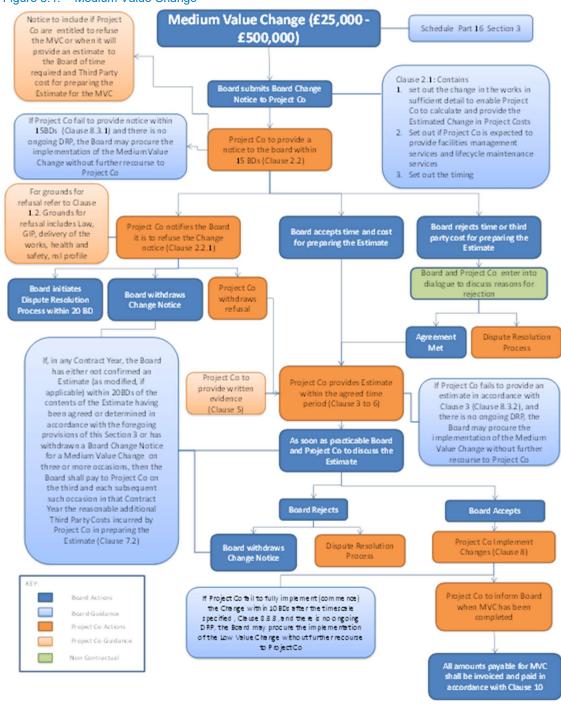


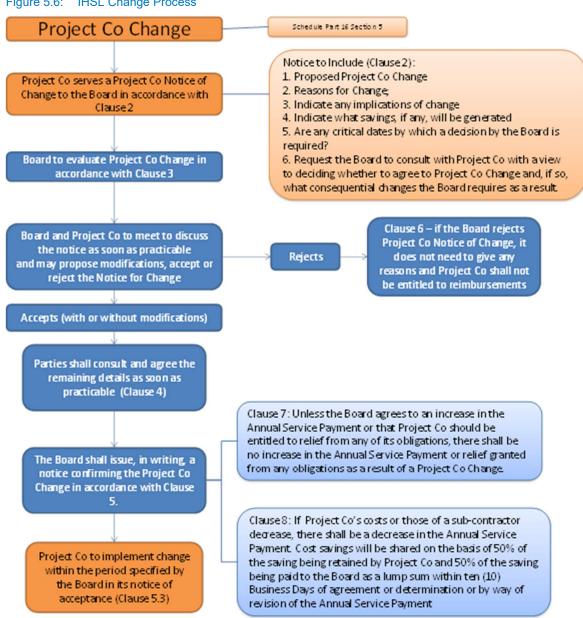


Figure 5.5: High Value Change High Value Change (HVC) (> £500,000) Schedule Part 16 Section 4 Board Actions Board serves Board Change Notice to Project Co (Cause 2) Board Guidance Identify any High Value Change Requirements
 Identify how the Board will assess whether the High Value Change Stage 2 Submission offers it value for Project Co Actions Parties to review HVC notice within SBDs and may agree written protocols (Clause 2.2 and 2.3) Project Co Guidance Board Withdraws Change Notice Project Co. submits HVC Proposal or informs Board of when proposal will be submitted, within 30 BDs. from receipt of Board Change Notice (Cause 3.1). Parties come to agreement Board reviews Project Co HVC Proposal Stage 1 Approved Project laries to discuss and review what should be included within HVC large 2 Submission within SBDs (Clause 2.3.2) and agree the time period to develop the submission within 10 BDs of the Stage 1 Approval (Clause 4.1.1) Project Coito submit HVC Stage i2 Subm accordance with Clause 4.3 Clause 8.2.2(a): Proposal fails to meet approval Rejected based on clause 8.2.2 (b) criteria Clause 8.2.2(b): Change to Target Cost meaning that Proposal is no longer Rejected based on clause 8.2.2(a) within the budget Board and Project Coltowork collaboratively to address the reasons for rejections and attempt to produce a revised HVC Stage 2 Rejected based on Clause 8.2.2(a) All amounts payable for HVC shall be invoiced and paid in accordance with Clause 12



#### 5.2.2.3 Project Co Changes

Figure 5.6: IHSL Change Process



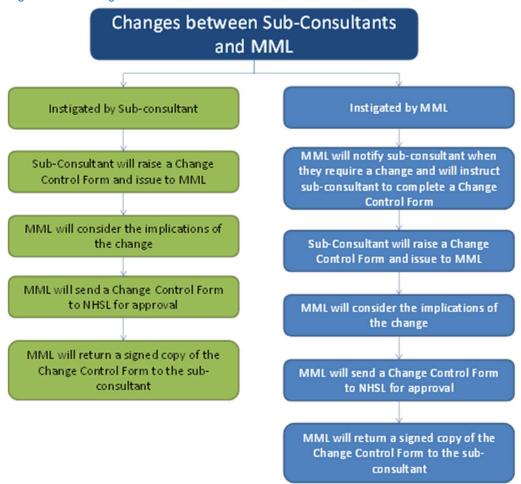


#### 5.2.3 **Between MML and NHSL**

#### 5.2.4 **Between MML and Sub-contractors**

Each sub-consultant will submit change requests to Mott MacDonald Limited if additional services or variations to their agreed scope of service are introduced. The following process should be followed dependent on the nature of the change.

Figure 5.7: Change Procedure between MML and Sub-consultants



Mott MacDonald Limited will return comments on the proposed change order within five working days. Mott MacDonald will notify the sub-consultant to proceed and implement the change or reject the change within ten working days of transmittal. If no response is given within the ten working day period then the request for change will be deemed as approved. Change control requests will be submitted to Mott MacDonald from each sub-consultant via email. Each sub-consultant will retain a schedule of approved change orders.



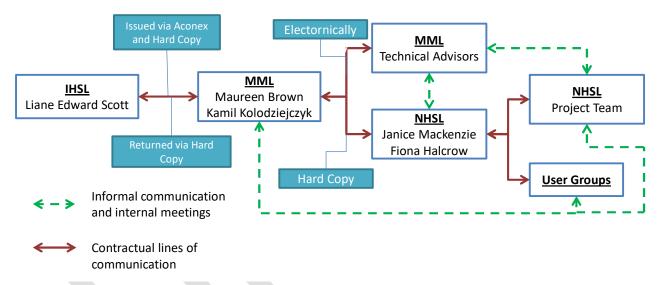
All variation orders submitted by sub-consultants will be accompanied by a resource schedule. In the event that Mott MacDonald Limited instruct works to commence without cost and programme affects being agreed all costs reasonably incurred in relation to the variation will be recovered.

The Board's representatives within each of the work-streams will be responsible for notifying the Project Director of proposed changes. Each of the work-stream leads will be responsible for notifying the Executive Project Management team of the changes requested.

#### 5.3 Reviewable Design Data (RDD)

#### 5.3.1 **RDD Communication Link Organogram**

Figure 5.8: RDD Communication Links



#### 5.3.2 **RDD Processes**

IHSL are required to issue 'Submitted Items' to the NHSL for review and approval under the Project Agreement Schedule Part 8 (Review Procedure), to which NHSL must respond with 15 business days else the RDD shall be deemed to have been returned with 'No Comment'. The following flowchart outlines the stages of the RDD review procedure.

RDD process guidance papers for both the Technical Advisers and the Project Team are available in Appendix I.



Figure 5.9: RDD Procedure SUMMARY OF SCHEDULE PART 8 - REVIEW PROCEDURE -RDD SUBMITTED ITEMS Project Co shall submit information reasonably in accordance with Clause 1.2 requested by the board representative (Clause 2) Board to return one copy of the relevant Submitted Item with 1580s recognised as either "No Comment" or Object based on insufficient nment based information Issued If the Board does not return a copy of If the Board does not return a copy If the Board does not select any Submitted Item (in accordance with Clause 1.2.2) within 1580s of Project Co shall be entitled referred to in Clause 3.10 within receipt of Submitted Item, then to make a selection from the Range of Finishes. (Clause 1580s the Submitted Item shall be deemed to constitute an objection Submitted Item shall be deemed to have returned to Project Co "no 1.2.3) by the Board (Clause 1.4) comment' ard Representative endorses ubmitted Item 'comment' or See next slide Project Co can dispute Comments -Project co either Rejected -Project Co any comment or proposed amend the proceed to amendment by referring the shall comply Submitted Item Submitted construct or proceed to the matter to DRP (Schedule Part in accordance item and reimplement with the Board's 20) and shall not act until such submit the next level of Submitted matter is so determined or Representative's Submitted design, subject Item (Clause otherwise agreed except at its comments and Item (Clause to amendment own risk (Clause 4.3). 4.1) re-submit as noted (Clause (Clause 4.3.2) 4.3.1) Dispute Resolution Resubmit Procedure Project Co Makes amendment Within 1080s of receiving Project Co implements Project Co does not act until the the comments of the Submitted Item at risk Board's Representative, **DRP** is determined Project Co shall send a copy of the Submitted agreed Item as amended to the Project Co implements
Submitted Item Board pursuant to Clause KEN 4.3 (Clouse 4.4) Sound Actions Project Co Actions **Final Steps** 



The RDD review procedure is being managed as two separate processes; Project Team Advisor Groups and Clinical Users Groups have been developed to help manage the review process and are discussed in more detail below.

### 5.3.2.1 Project Team Advisors

As discussed in Section 1.3, NHSL has engaged clinical and operational staff, through the NHSL Project Team, to review the submitted items to ensure the clinical needs and interests of the project are fully incorporated and to inform and review the Design. The NHSL Clinical Project Team is highlighted below. It is their responsibility to review the Submitted Items for each Production Group and include their comments within the final documents to be returned to IHSL within 15 business days.

Table 5.2: Project Team Advisors

Department	NHSL Advisor	MML Advisor	Method of recording comments
Board Representative	Brian Currie	-	-
Lead Technical Advisor	-	Graeme Greer	-
Mechanical and Electrical	Brian Douglas	Colin McCrae	Electronically
		Neil Wood	Electronically
Civil / Structural	-	Bryan MacKay	Electronically
Architecture	-	David Stillie	Hard Copy
Fire Strategy	Clive Armstrong	Joe Zwarts	Electronically
Facilities Management	Jackie Sansbury	Simon Alderson	Electronically
	Stuart Davidson		
Energy		Andrew Wholley	Electronically
	-	Andrew Thomson	
Acoustics	-	Adrian Morgan	Hard Copy
Helipad	Stuart Davidson	Charles Rayner	Hard Copy
	Fiona Halcrow		
Equipment	Jackie Sansbury	-	Electronically
	Douglas Coull	-	
	Patrick Macaulay	-	
	Neil McLennan	-	
Infection Control	Janette Richards	-	
User Group	Janice Mackenzie	David Stillie	Hard Copy
·	Fiona Halcrow		



#### 5.3.2.2 RDD Review

MML Technical Advisors will evaluate the RDD packs submitted by IHSL. The team will advise on issues surrounding the proposed design and check for compliance with current standards and regulations and Financial Close documents. The Submitted Items are to be returned to IHSL with 15 Business Days.

To manage the flow of information and documents successfully throughout the RDD process, MML are keeping a record of all documents received within the RDD pack. The RDD tracker, available in Appendix J, captures;

- the date the RDD pack was received;
- all document numbers:
- the date the pack was issued to User Groups;
- the date the Pack needs to be returned to IHSL; and
- the status of the drawing / document reviewed.

It should be noted that the tracker is a live document and maintained and updated by MML. The tracker is saved in MML internal document storage <u>here.</u>

Figure 5.10: RDD Review Process

IHSL delivers one hard copy of the RDD pack to MML an electronic copy via a transmittal on Aconex.

Project Team checks the documents to make sure there is nothing missing from the RDD Pack.

MML are updating a RDD tracker.

MML will forward the transmittal and electronic copy of the RDD pack to the relevant work stream lead.

The work stream lead will record all comments as per Table 5.2. All electronic documents shall be printed and stamped and returned to IHSL as a hard copy.

The Project Team will return one copy of the RDD pack containing their comments within 15 business days.



#### 5.3.2.3 User Groups - Production Group Review

To ensure the clinical needs and interests of the project are fully incorporated, NHSL has engaged clinical and operational staff to review the Submitted Items. There are 70 user groups involved in the review process to ensure that design and planning reflect clinical operational need.

The user groups have been divided up into 14 Production Groups (PG01-PG14), based on the construction sequence, to facilitate and streamline the review of the design data to suit the construction programme. The RDD process for user groups runs from April 2015 to March 2016. Table 5.3 presents the user groups and the date of the RDD Board meetings. A full Production Group Programme is available in Appendix K. The Meeting Tracker for the user group meetings is available in Appendix L. During these meetings, users will have the opportunity to have their comments recorded onto a single controlled copy of the submitted items.

Table 5.3: User Groups

PG	Ref	Department	RDD Meeting date
PG01	D1	RHSC Main Outpatients	29/04/2015
	D3	Orthoptics	22/04/2015
	D4	Audiology	28/04/2015
	D6	RHSC Therapies	27/04/2015
	D7	Plastics Dressings Clinic	28/04/2015
PG02	D10	Ambulatory Care Shared Support	02/06/2015
	D2	Cardiology & Respiratory	01/06/2015
	D5	Paediatric Dentistry	27/05/2015
	D8	Social Work	27/05/2015
	E1	Pod	03/06/2015
	<u>I1</u>	RHSC Entrance	03/06/2015
	K1	Family Support	29/05/2015
	K1	Radio Lollipop	29/05/2015
	D1	RHSC Main Outpatients	02/06/2015
PG03	R1	Clinical / Management Suite	23/06/2015
PG04	H3	SPHERE	16/07/2015
	K2	Family Hotel	09/07/2015
PG05	F1	Child & Adolescent Mental Health Services	02/08/2015
	J2	Spiritual & Pastoral Care	11/08/2015
	Q1	Radiology	05/08/15 and 06/08/15
	A2	Paediatric Acute Receiving Unit	07/08/2015
PG06	M1	DCN Outpatients	28/08/2015
	N1	DCN Entrance	28/08/2015
	Q1	Radiology	26/08/15 and 27/08/15
	A3	PARU / Emergency / Radiology Shared Support	01/09/2015

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PG	Ref	Department	RDD Meeting date
	A2	Paediatric Acute Receiving Unit	02/09/2015
	A1	Emergency Department	01/09/2015
PG07	G2	Equipment Library	18/09/2015
	M2	DCN Therapies	16/09/2015
	МЗ	Programmed Investigations Unit	18/09/2015
	M4	DCN Neurophysiology	16/09/2015
	S2	e-Health Infrastructure	22/09/2015
	T1	Node Rooms	22/09/2015
	L2	DCN Inpatients	18/09/2015
PG08	L2	DCN Inpatients	07/10/2015
	N2	DCN Wards / Health Records Support	07/10/2015
	S5	Central Staff Changing	13/10/2015
	V1	Waste Management & Service Yard	14/10/2015
PG09	12	Bed & Toy Stores	03/11/2015
	S1	Kitchen	28/10/2015
	S3	Domestic Services	30/10/2015
	S4	Materials Management	03/11/2015
	S6	Estates	03/11/2015
	S8	Sterile Supplies Store	30/10/2015
PG10	B1	PICU and HDU's	24/11/2015
	H2	Clinical Research Facility	25/11/2015
	J1	Bereavement Suite	25/11/2015
	P1	Operating Theatres & RHSC Surgical Day Case Unit	18/11/15 and 20/11/15
PG11	G3	On-Call Suite	16/12/2015
	L1	DCN Acute Care	11/12/2015
	P1	Operating Theatres & RHSC Surgical Day Case Unit	09/12/2015
PG12	C1.4	Haematology / Oncology Inpatients & Day cases	13/01/2016
	C2	RHSC Wards Support Areas	13/01/2016
	C4	Sleep Lab	19/01/2016
	D9	Medical Day Care Unit	19/01/2016
	U1	Labs	15/01/2016
	C1.1	Medical Inpatients	19/01/2016
PG13	C1.2	Surgical Long Stay Inpatients	09/02/2016
	C1.3	Neuroscience Inpatients	03/02/2015
	C1.5	Med / Surg / Neuro / Haemo Shared Support	08/02/2016
	C1.6	Adolescent Shared Accommodation	08/02/2016
	C1.7	Paediatric Neurophysiology	03/02/2016
	C1.8	Surgical Short Stay Inpatients	09/02/2015
	C3	Special Feeds Unit	05/02/2016



PG	Ref	Department	RDD Meeting date
PG14	C5	Classrooms	01/03/2016
	H1	Child Life & Health	24/02/2016
	S7	Restaurant	29/02/2016
	S9	Helipad Support	01/03/2016
	R2	Health Records	29/02/2016
	R1	Clinical / Management Suite	01/03/2016

To manage the flow of information and documents successfully throughout the PG RDD process, MML are keeping a record of all documents received within the RDD pack. The PG RDD tracker, available in Appendix M captures;

- the date the RDD pack was received;
- all document numbers;
- the date the pack was issued to User Groups;
- the date the Pack needs to be returned to IHSL; and
- the status of the drawing / document reviewed.

The following diagram highlights the key stages of the PG RDD process. For more detailed guidance please see the RDD guidance in Appendix I and read Project Agreement Schedule Part 8.

It should be noted that the tracker is a live document and maintained and updated by MML. The tracker is saved in MML internal document storage <a href="here">here</a>.



Figure 5.11: PG RDD Key Stages

IHSL delivers two hard copies of the RDD pack to MML and via Aconex Transmittal.

Project Team checks the documents to make sure there is nothing missing from the RDD Pack.

MML update the PG RDD tracker.

Project Team will hand deliver the RDD packs to the assigned person for each user group. One copy of the RDD pack will be retained in the Project Office and should not be removed.

User Group meet with the Project Team no later than 5 business days following receipt of the pack to record comments and agree the document status.

The Project Team will return one copy of the RDD pack containing their comments within 15 business days.

#### 5.3.2.4 'Non Relevant' Comments

The process of commenting on the Submitted Items has been discussed with IHSL and it has been agreed that the users will only provide comments on the information highlighted by IHSL. Any comments provided by the users / Board Team that are not associated with the highlighted area will be deemed not relevant by IHSL. It is the Board's Team and the users responsibility to apply these comments to the relevant documents when they are issued. To facilitate this process, and to avoid any comments being forgotten, MML are keeping a record of all comments deemed 'not relevant' on a Design Issues tracker in Appendix N. This document can then be reviewed when the relevant sections are issued.

It should be noted that the tracker is a live document and maintained and updated by MML. The tracker is saved in MML internal document storage link is ???

#### 5.4 **Request for Information (RFI) and Early Works**

The RFI process is a non-contractual process to effectively record requests for information from all parties. It has been agreed that all parties will endeavour to respond to RFIs within 7 days and that all RFI will be

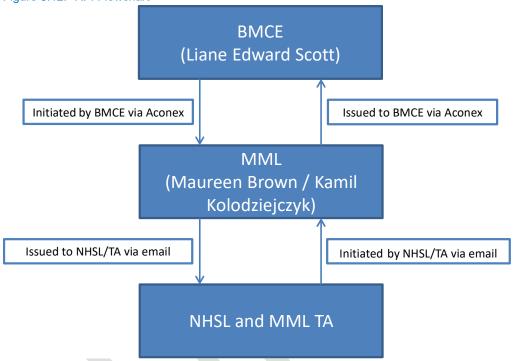


issued via Aconex. Figure 5.12 illustrates the formal lines of communication between the NHSL and BMCE with all correspondence being issue through MML.

An RFI tracker has been set up to monitor all requests for information from NHSL to IHSL and record all responses from IHSL. The tracker is available in Appendix O. The summary of this tracker is issued, via Aconex, to all parties on a weekly basis.

It should be noted that the tracker is a live document and maintained and updated by MML. The tracker is saved in MML internal document storage <u>here.</u>

Figure 5.12: RFI Flowchart



#### 5.5 Printing

IHSL are currently in the process of procuring a printing company for IHSL and NHSL to use for printing. Until a printing company is appointed MML are using their existing account with Hobbs for all necessary printing and a Hobbs Tracker has been set up To monitor the printing being ordered and the invoice total. This tracker is available in Appendix P.

It should be noted that the tracker is a live document and maintained and updated by MML. The tracker is saved in MML internal document storage <a href="here">here</a>.



### 6 Risk Management

#### 6.1 Risk Management Approach

Risks will be identified and managed at the PME meeting. The risks identified are to be managed in proactive manner in accordance with the mitigation strategy agreed for each risk identified. The risk register remains a live document which must be regularly reviewed and updated by all parties.

Risk will be categorised and quantitatively scored in accordance with the probability and impact scoring matrix outlined in Appendix Q. Following identification and risk assessment each risk will be ranked to understand the key risks within the project, in order that these can be priority managed. Mitigation strategies will be developed for each of the key risks and will be assigned to individual Work-stream Leads for action. Risks will be reviewed and reported to NHSL on a monthly basis for inclusion within the updated register. NHSL will monitor project risks.

Any new risk to the project should be raised at the PME.



### Re-Provision of RHSC and DCN at Little France

Construction Phase Project Execution Plan



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## Appendix A. Acronyms and Abbreviations

Table A.1: Acronyms and Abbreviations

Abbreviation / Acronym	Meaning
AEDET	Achieving Excellence Design Evaluation Toolkit
CAMUS	Company Administrator
CAMHS	Children and Adolescent Mental Health Services
CIG	Capital Investment Group
CDM	Construction Design Management
DCN	Department of Clinical Neurosciences
EY	Ernst & Young
FBC	Full Business Case
ITPD	Invitation To Participate in Dialogue
KSR	Key Stage Reviews
MML	Mott MacDonald Limited
NHSL	National Health Service Lothian
IHSL	Integrated Health Solutions Lothian
NPD	Non Profit Distribution
NSD	National Services Division
OBC	Outline Business Case
OGC	Office of Government and Commerce
PARU	Paediatric Acute Receiving Unit
PEP	Project Execution Plan
PFPI	Patient Forum and Public Involvement
PIC	Project Information Co-ordinator
PME	Project Management Executive
PSC	Professional Services Contract
RDT	Reference Design Team
REH	Royal Edinburgh Hospital
RHSC	Royal Hospital for Sick Children
RIE	Royal Infirmary of Edinburgh
SFT	Scottish Futures Trust
TG	Thomson Gray Partnership
WGH	Western General Hospital
BCR	Board Construction Requirements
PCP	Project Co Proposal
RDD	Reviewable Design Data
IT	Independent Tester



## Appendix B. Pen Profiles





## Appendix C. Project Directory





## Appendix D. Construction Programme





# Appendix E. Commissioning Programme





## Appendix F. Change Control Tracker





### Appendix G. Stage 1 Change Proposal Proforma





## Appendix H. Stage 2 Board Change Notice Pro-forma





# Appendix I. RDD Guidance Papers





## Appendix J. RDD Tracker





# Appendix K. Production Group Programme





## Appendix L. User Group Meeting Tracker





# Appendix M. PG RDD Tracker





# Appendix N. Design Issues Tracker





# Appendix O. RFI Tracker





# Appendix P. Hobbs Printing Tracker





# Appendix Q. Probability and Impact Scoring Matrix









Construction Phase Project Execution Plan

June 2015

**NHS** Lothian





Construction Phase Project Execution Plan

June 2015

**NHS** Lothian

RHSC and DCN Site Office Little France Crescent Edinburgh EH16 4JT

Construction Phase Project Execution Plan



### Issue and revision record

 Revision
 Date
 Originator
 Checker
 Approver
 Description

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 02/10/15
 K Gordon
 M Brown
 G Greer
 1st Draft for comments

#### Information Class: Standard

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Construction Phase Project Execution Plan



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Construction Phase Project Execution Plan



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Construction Phase Project Execution Plan



## **Executive Summary**

This Project Execution Plan (PEP) is intended to impart to the parties involved in the project a clear understanding of how they interact with each other, and sets out the governing strategy, organisation, control procedures and roles and responsibilities for the project. This PEP has been written for Lothian Health Board (NHSL) and Mott MacDonald Ltd (MML) and provides a concise introduction to the project for new team members in terms of how the project will be delivered.

It is intended that this document will be a working document, amended and further developed during the progression of the project, with revisions issued as appropriate. MML will be responsible for developing the document with input from the various parties of the project. It is not intended that this document takes priority over the formal contracts entered into between the parties and in the event of any ambiguity the contracts shall always take precedence over this document. This document shall also be read in conjunction with the Project Agreement.

All parties involved in or associated with the project are requested to comply with the contents of this PEP. Any issues which may result in necessary amendments, amplifications or improvements to practices or procedures contained herein should be raised for discussion with all parties.



# **Abbreviations**

The following abbreviations have been used in the Project Execution Plan:

Abbreviation	Full Name
ATD	Art and Therapeutic Design
BMCE	Brookfield Multiplex Construction Europe
CA	Company Administrator
CMT	Clinical Management Team
DCN	Department of Clinical Neurosciences
FC	Financial Close
FM	Facilities Management
HVC	High Value Change
ICT	Information and Communications Technology
IHSL	Integrated Health Solutions Lothian
IT	Independent Tester
LVC	Low Value Change
MEP	Mechanical, Electrical and Public Health
MML	Mott MacDonald Limited
MVC	Medium Value Change
NHSL	National Health Service Lothian
NPD	Non Profit Distribution
PG	Production Group
PIC	Project Information Coordinator
PMG	Project Management Group
RDD	Reviewable Design Data
RFI	Request for Information
RHSC	Royal Hospital for Sick Children
RIE	Royal Infirmary of Edinburgh
SFT	Scottish Futures Trust
SPB	Strategic Planning Board

### RHSC + DCN – Little France Construction Phase Project Execution Plan



### 1 Introduction

#### 1.1 Project Name

The name of this project is 'Re-provision of Royal Hospital for Sick Children and Department of Clinical Neuroscience at Little France', and is abbreviated to 'RHSC + DCN – Little France'.

#### 1.2 Project Background

The National Health Services Lothian (NHSL) Property and Infrastructure Strategy for 2011-15 recognised that the Royal Hospital for Sick Children (RHSC) and Department of Clinical Neurosciences (DCN) require significant modernisation to ensure an appropriate environment for the provision of high-quality paediatric and neuroscience services. Physical building and site constraints, together with practical phasing difficulties, limited the ability to achieve such modernisation in a successful and cost effective manner on the current respective sites.

The Re-provision of the RHSC and DCN, within a combined facility at Little France, is a key part of the NHSL's strategic capital investment programme, ensuring the safest possible hospital care for children and will deliver this national clinical strategy by co-locating adult and paediatric neurosurgery on the same hospital site. The new building will be located alongside the Royal Infirmary of Edinburgh (RIE) on the Little France site.

NHSL has procured the project through the Scottish Government Non Profit Distributing (NPD) model. The project achieved Financial Close (FC) on 13<sup>th</sup> February 2015 and construction of the new facility commenced on the 16<sup>th</sup> February 2015. The key activities in this stage will include; the RDD review, the completion of the design and construction and commissioning of the new hospital facility.



#### 1.3 The Team

#### 1.3.1 The Team Organograms

NHSL has appointed the following Advisers to support the Project:

Figure 1.1: NHSL and Advisors Structure





The following Project Delivery Organisational Structure diagram sets out the structure of the team, identifying the key roles included in the construction phase.

Project Co The Board IHSL NHSL Capital Group Lead Contractor **Facilities** Independent **Project Managers** Technical Advisors **Funders** Legal Advisors Management Brookfield Tester Mott MacDonald Mott MacDonald Macquarie MacRoberts LLP Bouygues Multiplex Arcadius Ltd Ltd Civil / Structural M&E Cost Consultant Architects Planning Thomson Gray MML MML **HLM Architects** Ironside Farrar M&E Acoustician Helipad Energy Acoustics Wallace Whittle Acoustic Logic MML MML Mercury Engineering **Facilities** Civil / Structural Fire Strategy Architecture Cost Advisors Management MML Robert Bird MML Gleeds MML Group

Figure 1.2: **Project Delivery Organisational Structure** 

#### 1.3.2 The Team Roles and Responsibilities

#### 1.3.2.1 Lothian Health Board (known as NHSL)

NHSL is responsible for providing health and treatment services for the population of the Edinburgh and the Lothian's. NHSL is the Employer for the Project.

The Clinical Management Teams (CMT) have operational management responsibility for children's services and DCN, and as part of this, are key players in the RHSC + DCN - Little France project.

#### Mott MacDonald Limited 1.3.2.2

Mott MacDonald Limited has been appointed by NHSL as the Project Manager and Technical Adviser to deliver the following services:

- Project Management services;
- Lead Strategic advice
- Facilities Management advice;
- Design and Construction advice, including:
  - Architecture:

### RHSC + DCN – Little France Construction Phase Project Execution Plan



- Mechanical and Electrical;
- Civil Structures;
- Helipad design advice;
- Acoustic Design;
- Fire; and
- Energy.

#### 1.3.2.3 Thomson Gray

Thomson Gray has been appointed as a sub-consultant to Mott MacDonald Limited to deliver the following services:

- Construction Cost Advisory services
- Whole Life Costing.

#### 1.3.2.4 Integrated Health Solutions Lothian

Integrated Health Solutions Lothian (IHSL) is a consortium consisting of a construction firm Brookfield Multiplex Construction Europe (BMCE), Capital Finance Group, Macquarie and Facilities Managers Bouygues. They have been appointed as Project Co and will deliver the design and construction of the new facility and provide facilities management and maintenance during the contracted 25 year operational period.

Due to the announcement of Construction Design and Management (CDM) Regulations 2015 on 6<sup>th</sup> April 2015 the Project has been aligned to comply with new regulations. BMCE acts as Principal Designer and Principal Contractor while IHSL acts as Client.

#### 1.3.2.5 MacRoberts LLP

The Legal Adviser had been appointed to provide Legal Services to NHSL in connection with the RHSC + DCN – Little France Project.

#### 1.3.2.6 Independent Tester

The Independent Tester (IT) has been jointly appointed by Project Co and the Board in February 2015.

The IT shall be responsible for design and construction reviews, undertaking regular inspections during the Works and provide details of any tests carried out by Project Co.

The IT shall report, on a monthly basis, the activities carried out by the IT to the Board and Project Co.

The Independent Tester will undertake all work necessary to permit the issue of Certificate(s) of Practical Completion, Commissioning Certificates and Snagging Notice(s) in accordance with Schedule Part 13 (Independent Tester Contract) of the Project Agreement. The issue of a Completion Certificate will trigger payments by the Board in respect of the phase the Completion Certificate refers to.

#### RHSC + DCN – Little France Construction Phase Project Execution Plan



#### 1.4 **Confidentiality**

All project staff, advisors and other persons who may have privileged access to information that is considered to be commercially confidential will be required to sign a confidentiality agreement before gaining access to such information.





# 2 Roles and Responsibilities

#### 2.1 Introduction

This section details the project management structure, the roles and responsibilities of the personnel responsible for delivering the Project and the terms of reference for the teams, workstreams and groups responsible for individual aspects of the Project.

#### 2.2 NHSL Programme Board

The NHSL Programme Board will oversee the implementation of the project.

The Board will:

- Receive regular progress reports from the Project Director;
- Seek Board Approval of outputs where appropriate;
- Approve Board Change and Project Co Change notices.

The Board will be carried by the Chief Executives of NHSL in turn and will comprise the following membership:

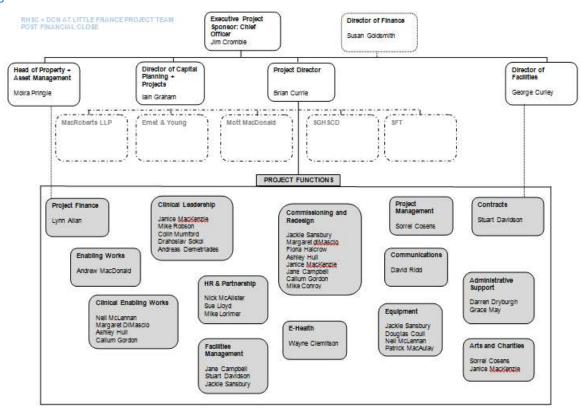
Table 2.1: NHSL Programme Board Members

	Name
Executive Project Sponsor	Jim Crombie
Director of Finance	Susan Goldsmith
Project Director	Brian Currie
Clinical Reps	Edward Doyle
Head of Property and Asset Management Finance	Moira Pringle
Director of Capital Planning and Projects	lain Graham
Rep. for Director of Communications	David Ridd
Non-executive members of Lothian NHS Board	Alison Mitchell (TBC)
Service Reps	Fiona Mitchell
	Jacquie Campbell
Lothian Partnership Forum	Susan Lloyd
Project Clinical Director	Janice Mackenzie
Head of Commissioning	Jackie Sansbury
Project Manager	Sorrel Cosens
South East and Tayside Regional Planning Group (SEAT)	Chris Browning
Observer from the Scottish Government	David Browning
Public Interest Director	Peter Reekie
	Director of Finance Project Director Clinical Reps Head of Property and Asset Management Finance Director of Capital Planning and Projects Rep. for Director of Communications Non-executive members of Lothian NHS Board Service Reps  Lothian Partnership Forum Project Clinical Director Head of Commissioning Project Manager South East and Tayside Regional Planning Group (SEAT) Observer from the Scottish Government



#### 2.3 **NHSL Project Team Structure**

Figure 2.1: NHSL Team Structure



#### 2.4 **Key Roles**

A description for the Project Teams Key Roles is provided below. There is also a pen profile for each member of the Project Team available in Appendix A.

#### 2.4.1 **Executive Project Sponsor** [tbc by NHSL]

The Project Sponsor has overall accountability for the project and is primarily concerned with ensuring that the project delivers the agreed business benefits.

The responsibilities of the Project Sponsor are as follows:

# RHSC + DCN – Little France Construction Phase Project Execution Plan



- ensuring that the business need is valid and correctly prioritised
- ensuring that the project remains a viable business proposition
- ensuring changes to the project are properly managed
- ensuring risks are managed
- approving key project deliverables
- initiating project reviews and supporting the process of review
- resolving issues (typically competition for resources and priority clashes) that are beyond the control of the Project Manager
- resolving conflict and removing obstacles to progress
- overall quality of the project, both the methods used to develop it and the end product.

#### 2.4.2 Project Director [tbc by NHSL]

The Project Director provides the interface between the project ownership and delivery and is responsible for defining the Project objectives and ensuring they are met within the agreed time, cost and quality constraints. The Project Director is also the link point for all major stakeholders at strategic level. The Project Director will:

- report to and be accountable to the Project Sponsor;
- attend the NHSL Project Board;
- chair the Project Team; and
- support designated work streams.

#### 2.4.3 Head of Property Asset Management [tbc by NHSL]

Role description to be advised by NHSL

### 2.4.4 Director of Capital Planning and Projects [tbc by NHSL]

The Director of Capital Planning and Projects is responsible for the development, procurement and implementation of capital and revenue funded projects and management of the Board's capital equipment replacement programme. They act as the link between the services, finance and governance and the construction interests of the project.

The Director of Capital Planning and Projects will:

- report to and be accountable to the Project Sponsor;
- support the delivery of services and clinical infrastructure, systems and facilities;
- lead on legal and commercial interfaces together with funding arrangements; and
- link to the existing Project Agreement and operational issues arising.

#### **2.4.5 Director of Facilities** [tbc by NHSL]

The Director of Facilities is responsible for ensuring the services that the new facility will rely on, such as meals and cleaning and for the support services that staff need, will be operational upon completion of the project and will continue to be effective throughout the operational period of the facility.



They Director of Facilities will:

- report to and be accountable to the Project Sponsor;
- support the planning and commissioning new buildings and facilities; and
- support the decommissioning/redevelopment of the exiting RHSC and DCN facilities;

#### 2.5 Delivery Team

The role of the Delivery Team is to:

- Manage and support the overall Project;
- Ensure that structure, processes and resources are in place to enable delivery of the Project's aims and objectives;
- Develop monitoring and reporting mechanisms;
- Ensure documentation and audit trails are maintained;
- Commission external support as necessary;
- Develop monitoring and reporting on progress of those plans;
- Establish and support Project workstreams;
- Develop and maintain Risk Register;
- Ensure the effective engagement of and communication with staff, service users and other stakeholders;
- Undertake Post Project Evaluation;
- Develop, maintain and review the Benefits Realisation Plan.

The Project Team will be chaired by the Project Director and will comprise the following membership:

Table 2.2: NHSL Project Team [tbc by NHSL]

Role	Name
Project Director	Brian Currie
Project Manager	Sorrel Cosens
Project Finance	Lynn Allan
Equipment Lead	Neil McLennan
Clinical Enabling	Margaret DiMascio
Enabling Works Project Manager	Andrew MacDonald
Project Clinical Director	Janice Mackenzie
Clinical Support Project Manager	Fiona Halcrow
Head of Commissioning	Jackie Sansbury
Contracts Manager	Stuart Davidson
Commissioning Manager	Ashley Hull
Commissioning Manager	Jane Campbell
Communication Manager	David Ridd
Administration	Grace May
Administration	Darren Dryburgh



#### 2.6 Stakeholders

The role of the Stakeholders is to:

- Provide a community perspective in the development of new services;
- Identify opportunities for members of the group and wider community to get involved and be heard;
- Assist in seeking the views of the wider community;
- Help to develop links with local groups and networks; and
- Provide a communications link to pass on information regarding the developments to the organisation or group that they represent.

The project is influenced by two branches of stakeholder groups:

- Internal Clinical and management groups
  - Estates & Facilities Management;
  - Clinical User Groups (Refer to Table 3.4) including Radio Lollipop;
  - Partnership;
  - Other regional NHS Boards (including South East Scotland and Tayside Regional Planning Board).
- 2. External parties with specific project interest
  - Scottish Futures Trust;
  - Scottish Government;
  - City of Edinburgh Council;
  - Architecture & Design Scotland;
  - Arts Projects;
  - Teenage Cancer Trust.

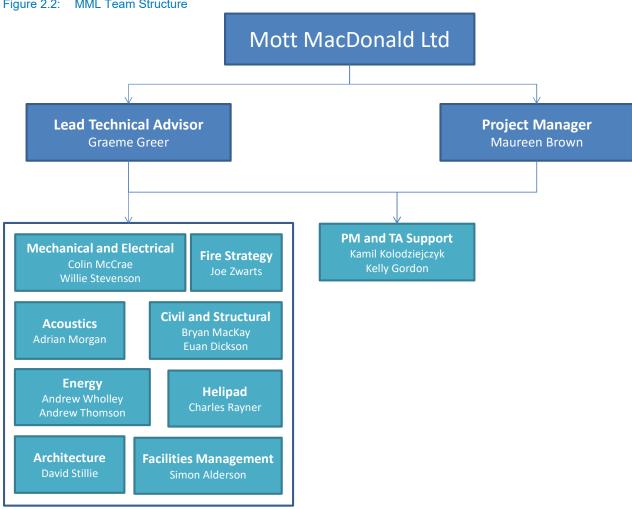
#### 2.6.1 Advisory Team

The NHSL Project Team will be supported by MML Project Managers and Technical Advisers. The role of the advisory team is to review RDD information on behalf of the Board and provide technical assistance and guidance as required by the Board for the services listed under section 1.3.2.2.



#### 2.6.1.1 MML Team Structure

Figure 2.2: MML Team Structure



#### 2.7 **Workstreams**

To assist with management of the different elements of the project, the project has been split up into the following workstreams:

- **Project Management Executive**
- Design & Construction, including M&E and Civil and Structures;
- Facilities Management;
- Equipment;
- Clinical Support (User Groups);

#### RHSC + DCN - Little France Construction Phase Project Execution Plan



- Clinical Services Commissioning;
- Communications;
- Arts and Therapeutic Design; and
- Information and Communication Technology.

The objective of workstreams is to encourage delivery teams to manage themselves in the most appropriate way. Workstream over-views are summarised below.

Table 2.3: Work-streams

Work-stream	Workstream Lead	Over-view	
Project Management Executive (PME)	Project Director	The PME comprises the Project Director, the Head of Commissioning, Clinical Project Director, Project Manager and Lead TA.	
		PME will liaise with all the work-streams to monitor progress and ensure the project is proceeding appropriately. The Project Director will act as the filter for all Technical Advisor queries to the NHSL Project Team.	
Design & Construction	Project Director	The project team will assist in the evaluation of the RDD packs submitted by IHSL. The team will advise on issues surrounding the proposed design and check for compliance with current standards and regulations and Financial Close documents.	
Facilities Management	Head of Commissioning	The FM work-stream shall assist in the evaluation of the RDD packs submitted by IHSL. FM work-stream shall work with the Board to refine FM requirements, documentation, payment mechanism and interface agreements which shall ensure the new facility is effectively and efficiently maintained.	
Equipment	Equipment Lead	A dedicated equipment work-stream has been identified to be responsible for determining the facility-wide equipment requirements. The Equipment work-stream shall assist in the evaluation of the RDD packs submitted by IHSL	
Clinical Support	Project Clinical Director	The NHSL Clinical Management Team is responsible for ensuring that design and planning reflect clinical operational need and best practice. They must ensure that an efficient, practical, functional facility is achieved through the construction phase.	
Clinical services Commissioning	Head of Commissioning	The Board head of commissioning is responsible for the overall NHS commissioning and service migrations to the Facility and decommissioning of the old facilities. This will include aligning familiarisation and commissioning of the building, the equipment and the services to ensure the building is ready for occupation.	
Communications	Project Director	TBC	
Art and Therapeutic Design	Project Manager	TBC	
Information and Communication Technology (ICT)	Clinical Support Project Manager	TBC	

### 3 Communication

#### 3.1 Communications

A Project Directory shall be established detailing the contact information for all members of the NHSL Project Team and Advisory Team. The Project Directory will be available on Aconex and is designed to be accessible to all parties to find the relevant persons to contact where necessary, a copy of the project directory is for the NHSL team is in Appendix B. The document is maintained by the Aconex Administrator for each organisation. Any updates required to the MML directory should be directed to Maureen Brown / Kamil Kolodziejczyk and any change to the NHSL directory should be directed to Sorrel Cosens.

The Communications Manager, David Ridd, will be responsible for all NHSL public communication, including notices and announcements to the media.

#### 3.1.1 Aconex

The project utilises Aconex as a channel for communication and storage of project documents and for all contract administration. Aconex is the management tool for the following procedures/protocols:

- Design Management and storage;
- Risk Register;
- Data Room;
- Collation of Board policies and reference documents;
- Procurement and Contract documents;
- Transmittals;
- RFIs:
- Change Control; and
- General Correspondence.

#### 3.1.2 Aconex Administration Roles & Responsibilities:

Each project has users carrying out the following admin roles:

- Project Information Coordinator (PIC) The PICs are responsible for requesting new companies and adding new users to the project and amending user rights accordingly. Any changes to the configuration of Aconex must be authorised by a PIC. On this Project the PIC for NHSL is Sorrel Cosens and for MML it is Maureen Brown;
- Company Administrator (CA) At least one user per company should be nominated to be the CA for that company. This person can create new users for their company and edit existing user details and the rights of their company users. This user will also be able to train other users within their own companies in the basic areas of the system. Company Administrators are as per Table 3.1.

Table 3.1: Company Administrators

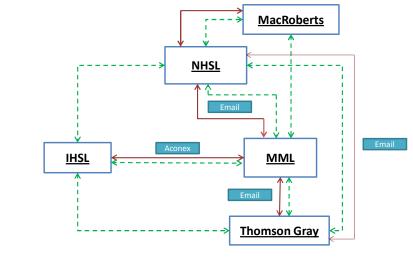
Role	COMPANY	ADMINISTRATORS
PIC	NHSL	Sorrel Cosens
	MML	Maureen Brown
CA	NHSL	TBC

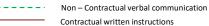


Role	COMPANY	ADMINISTRATORS
	MML	Maureen Brown / Kamil Kolodziejczyk

#### 3.1.3 **Communication Links**

Figure 3.1: High Level Communication Links





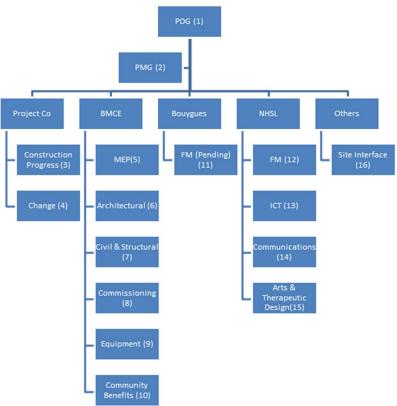




#### 3.2 Meetings

### 3.2.1 Meeting Structure

Figure 3.2: Meeting Structure



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#### 3.2.2 Meeting Matrix

Table 3.2: Meeting Matrix

Number	Meeting	Occurrence	Lead Organisation	Chair
1	Project Delivery Group (PDG)	Monthly	Project Co	Wallace Weir
2	Project Management Group (PMG)	Fortnightly	Project Co	Wallace Weir
3	Construction Progress	Monthly	Project Co	Wallace Weir
4	Change	Fortnightly	Project Co	David Martin
5	MEP	Fortnightly	BMCE	Ken Hall
6	Architectural	As required	BMCE	Liane E Scott
7	Civil and Structural	As required	BMCE	Liane E Scott



Number	Meeting	Occurrence	Lead Organisation	Chair
8	Commissioning	Monthly	BMCE	Darren Pike
9	Equipment	Monthly	BMCE	Ken Hall/ Robert Nethery
10	Community Benefits	TBC	BMCE	Caron Dunlop
11	FM	TBC	Bouygues	Pending
12	FM	Monthly	NHSL	Jackie Sansbury
13	ICT	Eight Weekly	NHSL	Fiona Halcrow
14	Communications	Six Weekly	NHSL	David Ridd
15	ATD	Six Weekly	NHSL	Janice Mackenzie
16	Site Interface	Weekly	Others	Scott Lawson

#### 3.2.3 Records

It is the responsibility of the meeting Chair to document all records of meetings held between NHSL and Project Co and to distributed to all parties involved in the meeting via Aconex. A copy of the minutes is stored by MML on the company management system 'PiMS'. The NHSL copy of the minutes shall be stored on the shared drive [NHSL to insert location on shared drive here].

#### 3.2.3.1 Retention of Records

The retention of records post Service Commencement date will need to be considered as Aconex will cease to function unless the Board pays for a 25 year subscription.

Construction Phase Project Execution Plan



### 4 Construction Phase Procedures

#### 4.1 Key Milestones

Brookfield Multiplex Construction Europe is responsible for monitoring and updating the construction programme. The high level construction programme is available in Appendix C.

IHSL will provide NHSL with an update on the milestones progress in the monthly Construction Progress Report. The programme will only be re-issued following a change that has an impact on the current programme.

Table 4.1 outlines the key construction milestones as detailed by the construction programme in Appendix C.

Table 4.1: Key Construction Milestones

Milestone:	Date:
Site Possession	16/02/2015
Decommission De-watering Systems	13/01/2016
IHSL handover completed hospital	03/07/2017

#### 4.2 Reporting

ISHL are currently required to give the Board a 3 month look a-head programme, an RDD schedule and a meeting schedule.

#### 4.2.1 Construction Progress Report

IHSL will produce a monthly Construction Progress Report providing an update on the following topics:

- Safety Summary;
- Quality;
- Progress Report;
- Construction Report;
- Programme;
- Procurement;
- Design;
- Commercial; and
- Progress photos.

### 4.3 Management Trackers

Mott MacDonald Ltd will use a number of reporting trackers to aid in the management of incoming and outgoing information, comments and requests for information during the construction phase. The list of current trackers is outlined in Table 4.2.



Table 4.2: Management Trackers

14510 1.2.	nariagomoni Trackero			
Tracker Name	Brief Description	Issued by MML to NHSL	NHSL Shared Drive	MML PIMS Link
Change Control	Captures all internal Board proposed changes and Change requests.	Fortnightly	K:\RHSC and DCN NPD\Design\Change Control	Change control.
RDD Tracker	Records all incoming RDD Packs from IHSL, the dates the packs are issued to the Project Team, the date in which NHSL needs to respond to IHSL and the status NHSL are assigning to the drawing.	Weekly	K:\RHSC and DCN NPD\Design\RDD Process\RDD Tracker Folder	RDD Tracker.
PG RDD Tracker	Records all incoming PG Packs from IHSL, the dates the packs are issued to the User Groups, the date in which NHSL needs to respond to IHSL and the status NHSL are assigning to the drawing.	Weekly	K:\RHSC and DCN NPD\Design\RDD Process\RDD Tracker Folder	PG RDD Tracker.
User Group Meeting Tracker	Records the time and date of all user group meetings, including who has confirmed attendance and the address each pack is to be delivered to.	Monthly	-	<u>User</u> Group
Request for Information	Records all requests for information from NHSL to IHSL.	Weekly	K:\RHSC and DCN NPD\Design\RDD Process\RFIs	RFI Tracker.
Design Issues	Captures all comments from the Board RDD meetings that are deemed 'not relevant' by IHSL and, therefore, will be ignored if recorded onto the RDD documents.	Weekly	K:\RHSC and DCN NPD\Design\RDD Process\RDD Tracker Folder	<u>Design Issues</u>
Hospital Wide Changes to Equipment	Captures changes to equipment identified during the RDD reviews that affect the entire hospital.	As required	TBC	<u>Hospital</u> wide

Please note of all of the above trackers, the RFI Tacker is the only tracker shared with IHSL. All others are for NHSL internal use only and must not be shared with a third party.

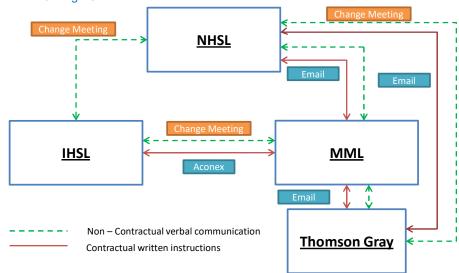
### 4.4 Change Control

All parties involved will follow the change control procedures in accordance with Schedule Part 16 (Change Protocol) of the Project Agreement. MML maintain and update a tracker with all Board proposed changes and Board Change Notices. An example of the tracker is available in Appendix D and an updated tracker will be issued to NHSL on a fortnightly basis in advance of each change meeting.



#### 4.4.1 Change Control Communication Link Organogram

Figure 4.1: Change Control



#### 4.4.2 Board process for proposing and approving potential changes

The flowchart in Figure E.1 Appendix E illustrates the stages of the process the Board needs to go through when proposing and approving potential changes internally, prior to producing a Board Change Notice.

An example of the potential Change Proposal pro-forma is available in Appendix F.

#### 4.4.3 Board Change

Following internal approval of a potential change the Board must submit a Board Change Notice to Project Co in accordance with Schedule Part 16 Section 2 (Low Value Changes), Section 3 (Medium Value Changes) or Section 4 (High Value Changes). MML will be responsible for document control by way of forwarding to Thomson Gray for costing to determine a low, medium or high value change and issuing all Board Change Notices to Project Co using the Pro-forma included in Appendix G.

The flowcharts in Figure E.2, Figure E.3 and Figure E.4 Appendix E illustrate the procedural stages of a Low, Medium and High Value Change. For detailed information in relation to Change please refer to Schedule Part 16 (Change Protocol) of the Project Agreement.

#### 4.4.4 Project Co Change

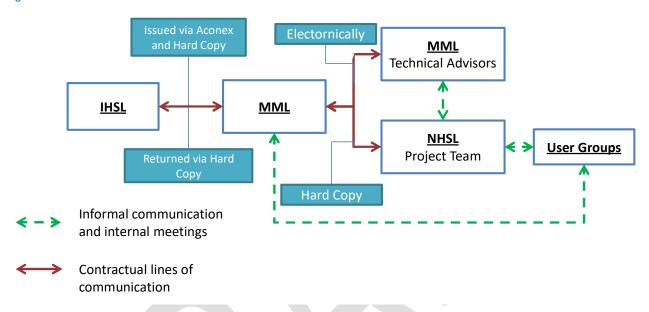
Should Project Co need to initiate a change the process illustrated in Figure E.5 Appendix E shall be followed.



#### 4.5 Review Procedure

#### 4.5.1 Reviewable Design Data (RDD) Communication Link Organogram

Figure 4.2: RDD Communication Links



#### 4.5.2 Reviewable Design Data

Project Co shall submit an item of Reviewable Design Data to the Board for review under Schedule Part 8 (Review Procedure) of the Project Agreement. An RDD pack is a group of design drawings, specifications or finishes to be reviewed by the Board. The full list of RDD submitted items as agreed at FC is provided in Section 5 Schedule Part 6 (Reviewable Design Data) of the PA.

Within 15 Business Days of the date of receipt of the Submitted Item the Board's Representative shall return one copy to Project Co endorsed Level A, B, C or D. A description of Levels A-D can be found in Schedule Part 8 of the Project Agreement as is summarised below:

- Level A "no comment" An endorsed document with no further comments / amendments.
- Level B "proceed subject to amendment as noted" Project Co to make amendments as noted and continue next level of design or to implement the works without re-submitting documents
- Level C "subject to amendment as noted" Project Co to make amendments and re-submit documents in accordance with the Schedule Part 8, within 10 Business Days of receiving Board comments
- Level D "rejected" Project Co to review and re-submit documents in accordance with the Schedule Part 8, within 10 Business Days of receiving Board comments



Failure to return the Submitted Items with 15 business days will result in Submitted Item deemed to have been returned endorsed with 'Level A - no comment'.

A flowchart outlining the stages of the RDD review procedure for the Project Team is available in Appendix H.

The RDD review procedure is being managed as two separate processes; Project Team Advisor Groups and Clinical Users Groups have been developed to help manage the review process and are discussed in more detail below.

#### 4.5.2.1 Project Team Advisors

The NHSL Project Team and Technical Advisers will review the RDD Submitted Items to ensure the proposed design complies with Board Construction Requirements, Project Co Proposals and /or Reviewable Design Data and operational functionality. Table 4.3 indicates the NHSL and MML members responsible for the review of RDD Submitted Items.

Table 4.3: NHSL and MML review team

Department	NHSL Advisor	MML Advisor	Method of recording comments	
Board Representative	Brian Currie	-	-	
Lead Technical Advisor	-	Graeme Greer	-	
Infection Control	Janette Richards	-	-	
Mechanical and Electrical	Brian Douglas	Colin McCrae	Electronically	
	Stuart Davidson	Willie Stevenson	Electronically	
Civil / Structural	-	Bryan MacKay	Electronically	
Architecture	-	David Stillie	Hard Copy	
Fire Strategy	Clive Armstrong	Joe Zwarts	Electronically	
Facilities Management	Jackie Sansbury	Simon Alderson	Electronically	
	Stuart Davidson			
Energy		Andrew Wholley	Electronically	
	-	Andrew Thomson		
Acoustics	-	Adrian Morgan	Electronically	
Helipad	Stuart Davidson	Charles Rayner	Electronically	
	Fiona Halcrow			
Equipment	Jackie Sansbury	David Stillie	Electronically	
	Douglas Coull	-		
	Patrick Macaulay	-		
	Neil McLennan	-		
Clinical Management	Janice Mackenzie	David Stillie	Hard Copy	
	Fiona Halcrow			



#### 4.5.2.2 Management of Project Team Advisors RDD

To manage the flow of information and documents successfully throughout the RDD process, MML will keep a record of all documents submitted through Review Procedure. The RDD tracker will be a working document, updated and distributed to Project Team on a regular basis and will consist of the following:

- the date the RDD pack was received;
- all document numbers;
- the date the pack was issued to Project Team / Technical Advisors;
- the date the Pack needs to be returned to IHSL; and
- the status of the drawing / document reviewed.

An example of RDD tracker is available in Appendix I.



IHSL delivers one hard copy of the RDD pack to MML an electronic copy via a transmittal on Aconex.

Project Team checks the documents to make sure there is nothing missing from the RDD Pack.

MML updates the RDD tracker.

MML will forward the transmittal and electronic copy of the RDD pack to the relevant work stream lead.

The work stream will meet to agree comments and record all comments as per Table 4.3. All electronic documents shall be printed and stamped and returned to IHSL as a hard copy.

The Project Team will return one copy of the RDD pack containing their comments within 15 business days.

### RHSC + DCN – Little France Construction Phase Project Execution Plan



#### 4.5.2.3 User Groups - Production Group Review

To ensure the clinical needs and interests of the project are fully incorporated, NHSL has engaged clinical and operational staff to review the Submitted Items. There are 70 departmental user groups involved in the review process to ensure that design and planning reflect clinical operational need.

The user groups have been divided up into 14 Production Groups (PG01-PG14), based on the BMCE construction sequence, to facilitate and streamline the review of all Design Data to suit the construction programme. The RDD process for user groups runs from April 2015 to March 2016.

- Appendix J presents the user groups and the date of the RDD Board meetings.
- The Production Group Programme is available in Appendix K.
- The Meeting Tracker for the user group meetings is available in Appendix L.

During the user group meetings, users will have the opportunity to have their comments recorded onto a single controlled copy of the Submitted Items.

To manage the flow of information and documents successfully throughout the PG RDD process, MML will keep a record of all documents submitted through Review Procedure. The PG RDD tracker will be a working document updated and distributed to the Project Team on a regular basis and will consist of the following:

- the date the RDD pack was received;
- all document numbers;
- the date the pack was issued to User Groups;
- the date the Pack needs to be returned to IHSL; and
- the status of the drawing / document reviewed.

An example of PG RDD tracker is available in Appendix M.

The Figure 4.4 PG RDD Key Stages highlights the phases of the PG RDD process. For more detailed guidance please see the RDD guidance in Appendix H and refer to Schedule Part 8 (Review Procedure) of the Project Agreement.

Figure 4.4: PG RDD Key Stages

IHSL delivers two hard copies of the RDD pack to MML and an electronic copy via Aconex Transmittal.

Project Team checks the documents to make sure there is nothing missing from the RDD Pack.

MML update the PG RDD tracker.

Project Team will hand deliver the RDD packs to the assigned person for each user group. One copy of the RDD pack will be retained in the Project Office and should not be removed.

User Group meet with the Project Team on the pre-arranged meeting date to record consensus comments.

The Project Team review the comments and agree a status for the document. They will then return one copy of the RDD pack containing their comments within 15 business days.

### 4.5.2.4 'Non Relevant' Comments

The process of commenting on the Submitted Items has been discussed and agreed with IHSL that the users and advisors will only provide comments on the information highlighted by IHSL. Any comments provided by the users / Project Team that are not associated with the highlighted area will be deemed not relevant by IHSL. It is the Project Team and the users responsibility to apply these comments to the relevant documents when they are issued. To facilitate this process, and to avoid any comments being forgotten, MML will keep a record of all comments deemed 'not relevant' on a Design Issues tracker in Appendix N. This document can then be reviewed when the relevant sections are issued.



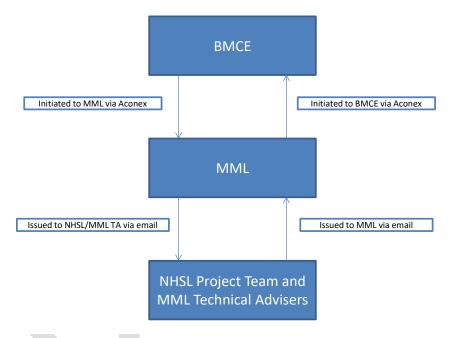
### 4.6 Request for Information (RFI) and Early Warnings

The RFI process is a non-contractual process to effectively record requests for information from all parties. It has been agreed that all parties will endeavour to respond to RFIs within 7 days and that all RFI will be issued via Aconex. Figure 4.5 illustrates the formal lines of communication between the NHSL and IHSL

An RFI tracker has been set up to monitor all requests and responses between the parties. The summary of this tracker is issued, via Aconex, to all parties on a weekly basis. The example of a tracker is available in Appendix O.

It should be noted that the tracker is a live document that is maintained and updated by MML. The tracker is saved in MML internal document storage.

Figure 4.5: RFI Flowchart



### 4.7 Printing

BMCE has procured Hobs Reprographics for the provision of all off-site printing required during the construction phase of the project. The Board are able to order prints from Hobs at the same rates agreed with BMCE. The rates are as detailed in Appendix P.

Hobs contact details:

Tel: 0131 226 3080

Email:

### RHSC + DCN – Little France Construction Phase Project Execution Plan



Where any printing is required by NHSL, written permission must be sought from the Project Director and/or a Project Board member. The order must be placed through an NHSL Project Administrator.





### 5 Commissioning

### 5.1 Workstreams

### 5.1.1 Facilities Management

During the construction phase of the project the FM work-stream shall work with the Board to refine FM requirements, documentation, payment mechanism and interface agreements which shall ensure the new facility is effectively and efficiently maintained.

The FM team is formed of NHSL staff with assistance from the MML FM Technical Advisor. The main team and team structures is as detailed in Figure 5.1.

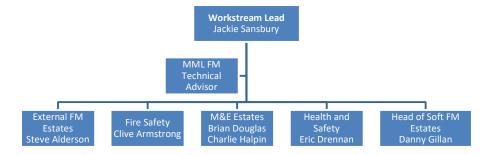
Key responsibilities and duties include:

- Reviewing RDD Submitted Items to check proposed designs, specifications and finishes are safe, operationally functional and can be appropriately serviced and maintained in accordance with current NHS standards and guidelines;
- Contributing to the delivery of strategic and operational objectives;
- Advising on FM costs and benchmarking; and
- Production of FM documentation including monthly progress reports.

Co-ordination / liaison issues may include:

- Management of FM documentation including the RHSC+DCN Mobilisation Schedule;
- Issuing and responding to FM RFI during the construction phase; and
- Producing, monitoring and updating the Commissioning Programme.

Figure 5.1: FM Workstream Structure



### 5.1.1.1 Reporting

Bouygues produce a report to NHSL and IHSL on a monthly basis detailing the progress of the Hard FM aspects of the Project. An example of one of the reports is provided in Appendix Q.



NHSL will be required to produce a monthly report to details the progress of the Soft FM aspects.

### 5.1.2 Equipment

A dedicated equipment work-stream has been identified to be responsible for determining the facility-wide equipment requirements. This group is tasked with confirming the users' ultimate equipment requirements for inclusion within the procurement model. This role will also consider the replacement and transfer strategies in place within the RHSC and DCN facilities in the term leading up to facility hand-over.

The equipment work-stream is formed of NHSL staff with input from clinical users throughout the RDD review period. The main team and team structure is as detailed in Figure 5.2.

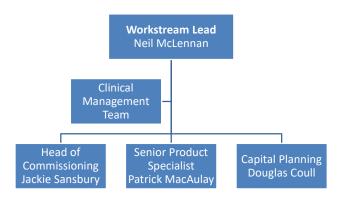
Key responsibilities & duties include:

- Review the equipment schedules issued throughout the RDD process;
- Maintenance/agreement of the Equipment List and Equipment Responsibility Matrix;
- Procurement (including specification, funding and programming of delivery) of Board equipment; and
- Provision /installation of Board equipment into final facility.

Co-ordination / liaison issues may include:

- Interface with BMCE work-stream to ensure aligned requirements and outputs;
- Liaison with NHSL teams and User Groups in respect of briefing requirements; and
- Co-ordination with procurement work-stream in relation to procurement compliance.

Figure 5.2: Equipment Workstream Structure



The current Equipment Schedule is provided in Appendix R. The equipment has been divided into four equipment groups (detailed in Table 5.1) to identify the party responsible for procuring the equipment and at which stage during the construction period the equipment needs to be purchased.



Table 5.1: Equipment Group Responsibilities Matrix Summary

		•	
Group	Procurement	Installation	Commissioning
Group 1	IHSL	IHSL	IHSL
Group 2A	NHSL	IHSL	IHSL
Group 2B	NHSL	NHSL	NHSL
Group 3	NHSL	NHSL	NHSL
Group 4	NHSL	NHSL	NHSL

### 5.1.2.1 Reporting

There is currently no documentation to inform the NHSL of IHSL's progress in procuring equipment.

NHSL will be required to produce a Monthly Report for the duration of the commissioning period to keep track of the procured equipment. In addition to this a programme will be developed to identify the procurement period for each piece of equipment on the Equipment Schedule.

### 5.1.3 Clinical Services Commissioning

A dedicated Clinical Services Commissioning team has been appointed to plan and manage the overall RHSC and DCN commissioning and service migrations to the new Facility and decommissioning of the old facilities. This will include aligning familiarisation and commissioning of the building, the equipment and the services to ensure the building is ready for occupation.

The Clinical Services Commissioning work-stream is formed of NHSL. The main team and team structure is as detailed in Figure 5.3.

The key roles and responsibilities of the commissioning team are to be advised.

Figure 5.3: Clinical Services Commissioning Workstream Structure



### 5.1.3.1 Reporting

29

There is currently no documentation to inform the NHSL of IHSL's progress in commissioning the services. NHSL will be required to produce a Commissioning Mobilisation Monthly Report for the duration of the commissioning period.



#### 5.1.4 **Information and Communication Technology**

The roles and responsibilities of the ICT workstream are to be advised.

### 5.1.4.1 Reporting

**TBC** 

#### 5.2 **Programme**

The BMCE Outline Commissioning Programme was last revised at Financial Close and can be viewed in Appendix S. The key commissioning milestones are detailed in Table 5.2.

Table 5.2: **Key Commissioning Milestones** 

Table 6.2. They continues only will estories	
Milestone	Date
Project Co give Board 12 month notice of installation of Group 2B equipment	01/04/2016
Give notice to IT and Board of commencement of Pre- Commissioning	16/08/2016
Board Provide Project Co with final Commissioning Programme (6 months prior to PC)	03/10/2016
Project Co give Board notice of Delivery of Group 2A equipment in accordance with Sch Pt 11 2.5	07/10/2016
Project Co give Board notice of installation of Group 2B equipment in accordance with Sch Pt 11 3.5	27/02/2017
Project Co give notice to Board to commence pre-completion commissioning	06/03/2017
Close down Zone A	13/03/2017
Project Co give notice to IT and Board of proposed completion date (3 Months prior PC Clause 17.5)	03/04/2017
IT/Data Network Connection Live	08/05/2017
Close down Zone C	29/05/2017
Completion of commissioning	05/06/2017
Close down Zone B	12/06/2017
Target Project Completion and Handover Date	03/07/2017
Provide Final Draft O&M manuals 10 days after completion date (Clause 18.5.2)	17/07/2017
Board Transfer of Patients as per Final Commissioning Programme	25/09/2017

The NHSL programme is still being developed and is subject to the Construction Handover programme.



The intention is to have programmes for each workstream with FM having 2 (Bouygues and Board). A master programme will then be developed for overall tracking.

### 5.3 Management Reporting Trackers

We are developing a master tracking sheet for the FM workstream, but we need to grow other workstreams under the commissioning banner prior to advancing this tracking sheet.

Table 5.3: Management Trackers

Tracker Name	Brief Description	Document Link	Issued by MML to NHSL
TBC	TBC	<u>TBC</u>	TBC





### 6 Risk Management

### 6.1 Risk Management Approach

Commercial and project risks will be identified and managed at the Project Management Executive (PME) meeting. The risks identified are to be managed in pro-active manner in accordance with the mitigation strategy agreed for each risk identified on the risk register. The risk register remains a live document which must be regularly reviewed and updated by all parties.

Risk will be categorised and quantitatively scored in accordance with the probability and impact scoring matrix. Following identification and risk assessment each risk will be ranked to understand the key risks within the project, in order that these can be priority managed. Mitigation strategies will be developed for each of the key risks and will be assigned to individual workstream leads for action. Risks will be reviewed for inclusion within the updated register. NHSL will monitor project risks.

Any new risk to the project should be raised at the PME.

### 6.1.1 Design Issue Tracker

MML are managing a Design Issue Tracker that will be reviewed monthly by the NHSL team at a Design Board Steering Group meeting. An example of the Project Design Risk Register is available in Appendix N, however, it should be noted this is a live document and is continually updated.

### RHSC + DCN - Little France Construction Phase Project Execution Plan



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## Appendix A. Pen Profiles







## Appendix B. Project Directory





## Appendix C. Construction Programme







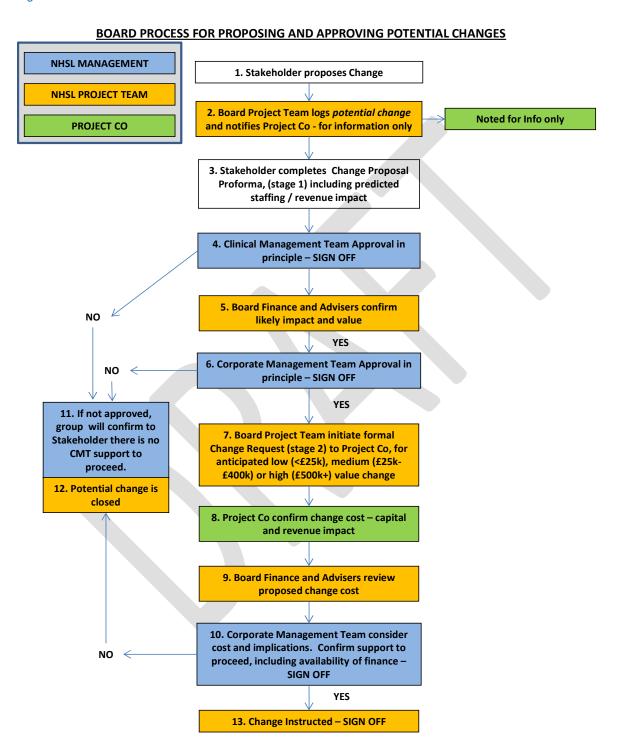
## Appendix D. Change Tracker





## Appendix E. Change Flowcharts

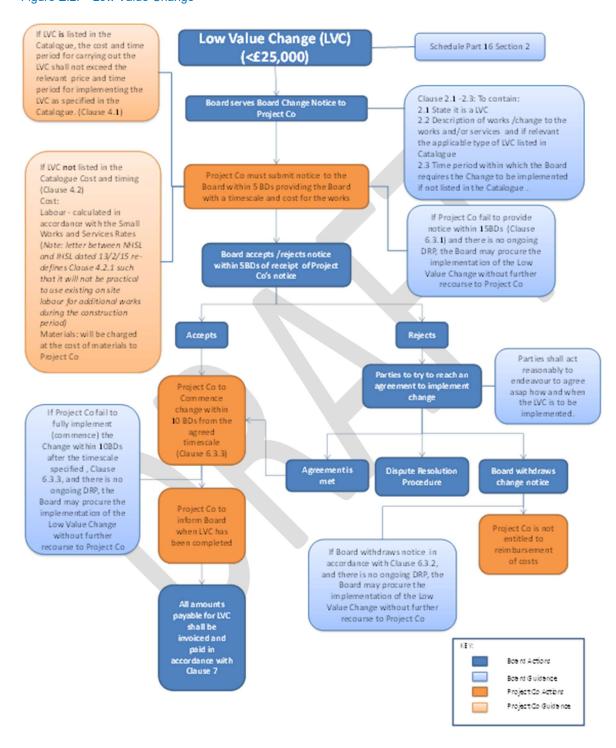
Figure E.1: Internal Board



Construction Phase Project Execution Plan

# Page 556 Mott MacDonald

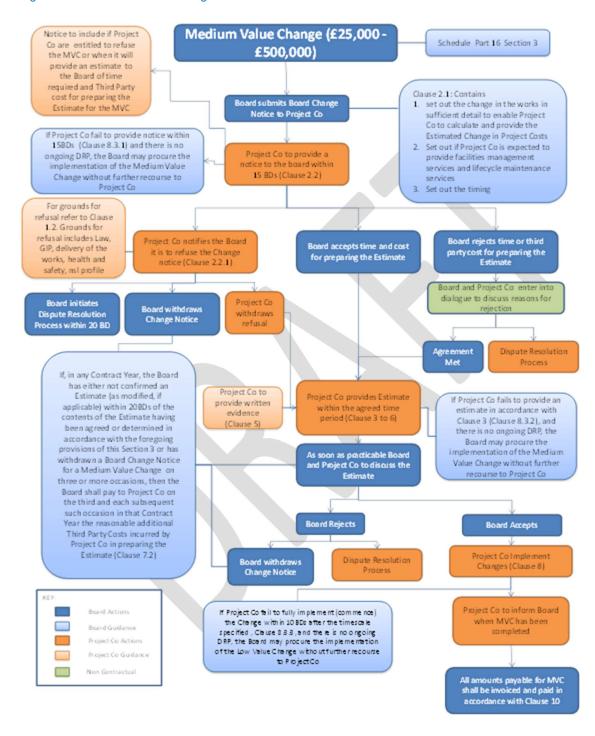
Figure E.2: Low Value Change



Construction Phase Project Execution Plan



Figure E.3: Medium Value Change



Construction Phase Project Execution Plan

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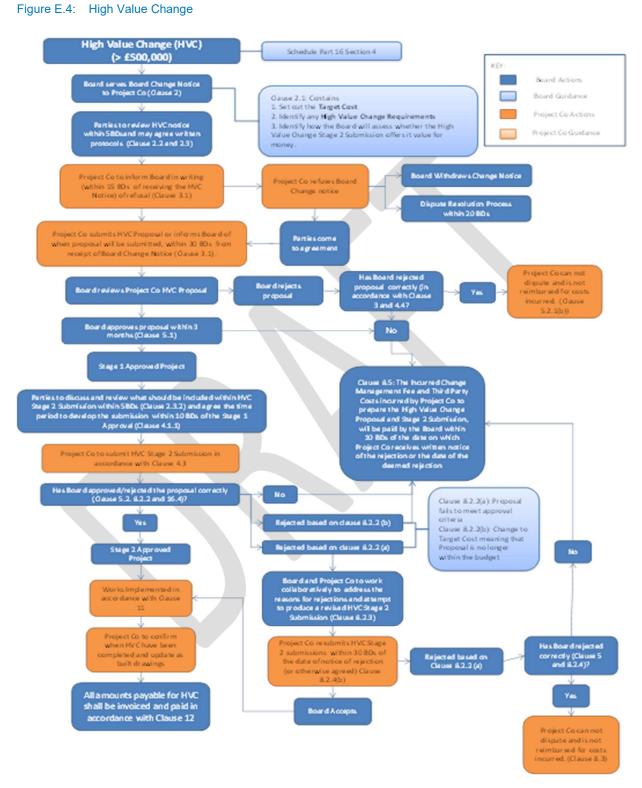
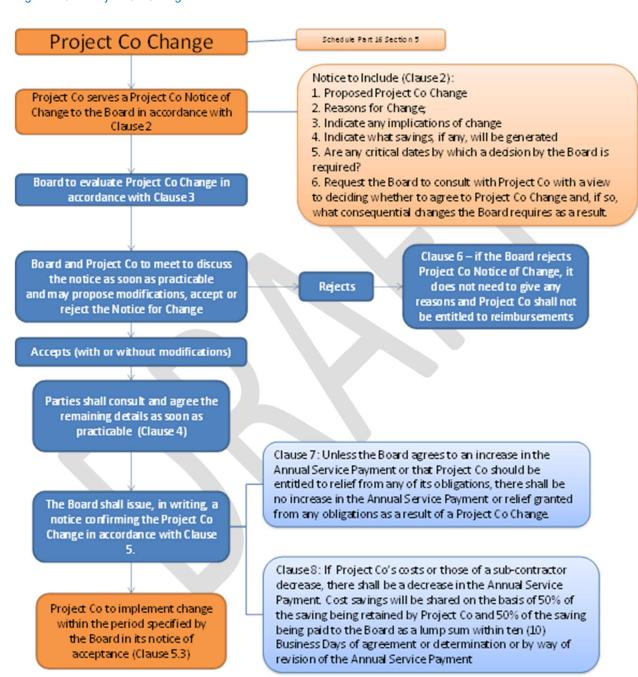




Figure E.5: Project Co Change



### RHSC + DCN - Little France Construction Phase Project Execution Plan







## Appendix F. Change Proposal Pro-forma





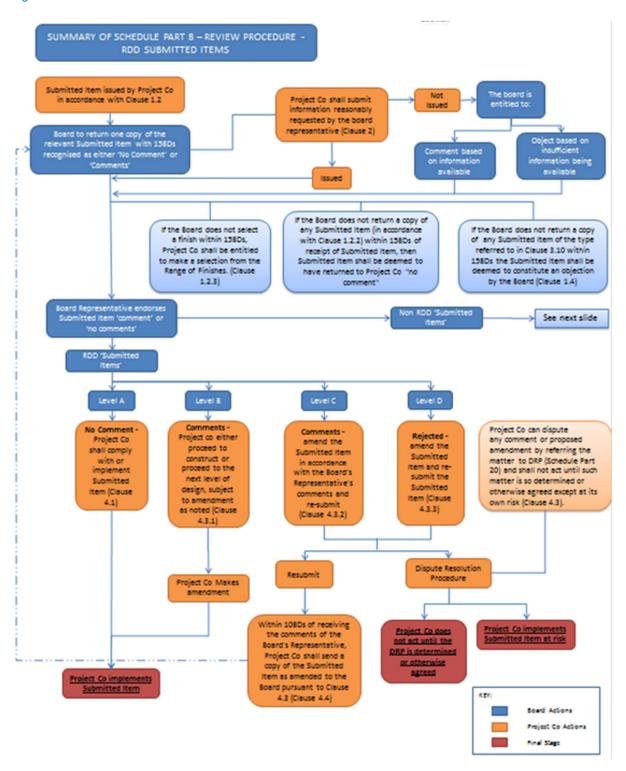
## Appendix G. Board Change Notice Proforma





## Appendix H. RDD Flowchart

Figure H.1: RDD Process



### RHSC + DCN - Little France Construction Phase Project Execution Plan









## Appendix I. RDD Tracker





## Appendix J. User Groups

Table J.1: User Groups

Table J.1:	User Grou	ips	
PG	Ref	Department	RDD Meeting date
PG01	D1	RHSC Main Outpatients	29/04/2015
	D3	Orthoptics	22/04/2015
	D4	Audiology	28/04/2015
	D6	RHSC Therapies	27/04/2015
	D7	Plastics Dressings Clinic	28/04/2015
PG02	D10	Ambulatory Care Shared Support	02/06/2015
	D2	Cardiology & Respiratory	01/06/2015
	D5	Paediatric Dentistry	27/05/2015
	D8	Social Work	27/05/2015
	E1	Pod	03/06/2015
	<b>I1</b>	RHSC Entrance	03/06/2015
	K1	Family Support	29/05/2015
	K1	Radio Lollipop	29/05/2015
	D1	RHSC Main Outpatients	02/06/2015
PG03	R1	Clinical / Management Suite	23/06/2015
PG04	НЗ	SPHERE	16/07/2015
	K2	Family Hotel	09/07/2015
PG05	F1	Child & Adolescent Mental Health Services	02/08/2015
	J2	Spiritual & Pastoral Care	11/08/2015
	Q1	Radiology	05/08/15 and 06/08/15
	A2	Paediatric Acute Receiving Unit	07/08/2015
PG06	M1	DCN Outpatients	28/08/2015
	N1	DCN Entrance	28/08/2015
	Q1	Radiology	26/08/15 and 27/08/15
	A3	PARU / Emergency / Radiology Shared Support	01/09/2015
	A2	Paediatric Acute Receiving Unit	02/09/2015
	A1	Emergency Department	01/09/2015
PG07	G2	Equipment Library	18/09/2015
	M2	DCN Therapies	16/09/2015
	M3	Programmed Investigations Unit	18/09/2015
	M4	DCN Neurophysiology	16/09/2015
	S2	e-Health Infrastructure	22/09/2015
	T1	Node Rooms	22/09/2015
	L2	DCN Inpatients	18/09/2015
PG08	L2	DCN Inpatients	07/10/2015
	N2	DCN Wards / Health Records Support	07/10/2015
	S5	Central Staff Changing	13/10/2015
	V1	Waste Management & Service Yard	14/10/2015





PG	Ref	Department	RDD Meeting date
PG09	12	Bed & Toy Stores	03/11/2015
	S1	Kitchen	28/10/2015
	S3	Domestic Services	30/10/2015
	S4	Materials Management	03/11/2015
	S6	Estates	03/11/2015
	S8	Sterile Supplies Store	30/10/2015
PG10	B1	PICU and HDU's	24/11/2015
	H2	Clinical Research Facility	25/11/2015
	J1	Bereavement Suite	25/11/2015
	P1	Operating Theatres & RHSC Surgical Day Case Unit	18/11/15 and 20/11/15
PG11	G3	On-Call Suite	16/12/2015
	L1	DCN Acute Care	11/12/2015
	P1	Operating Theatres & RHSC Surgical Day Case Unit	09/12/2015
PG12	C1.4	Haematology / Oncology Inpatients & Day cases	13/01/2016
	C2	RHSC Wards Support Areas	13/01/2016
	C4	Sleep Lab	19/01/2016
	D9	Medical Day Care Unit	19/01/2016
	U1	Labs	15/01/2016
	C1.1	Medical Inpatients	19/01/2016
PG13	C1.2	Surgical Long Stay Inpatients	09/02/2016
	C1.3	Neuroscience Inpatients	03/02/2015
	C1.5	Med / Surg / Neuro / Haemo Shared Support	08/02/2016
	C1.6	Adolescent Shared Accommodation	08/02/2016
	C1.7	Paediatric Neurophysiology	03/02/2016
	C1.8	Surgical Short Stay Inpatients	09/02/2015
	C3	Special Feeds Unit	05/02/2016
PG14	C5	Classrooms	01/03/2016
	H1	Child Life & Health	24/02/2016
	S7	Restaurant	29/02/2016
	S9	Helipad Support	01/03/2016
	D0	Health Records	29/02/2016
	R2	riediti records	29/02/2010



## Appendix K. Production Group Programme





## Appendix L. User Group Meeting Tracker







## Appendix M. PG RDD Tracker

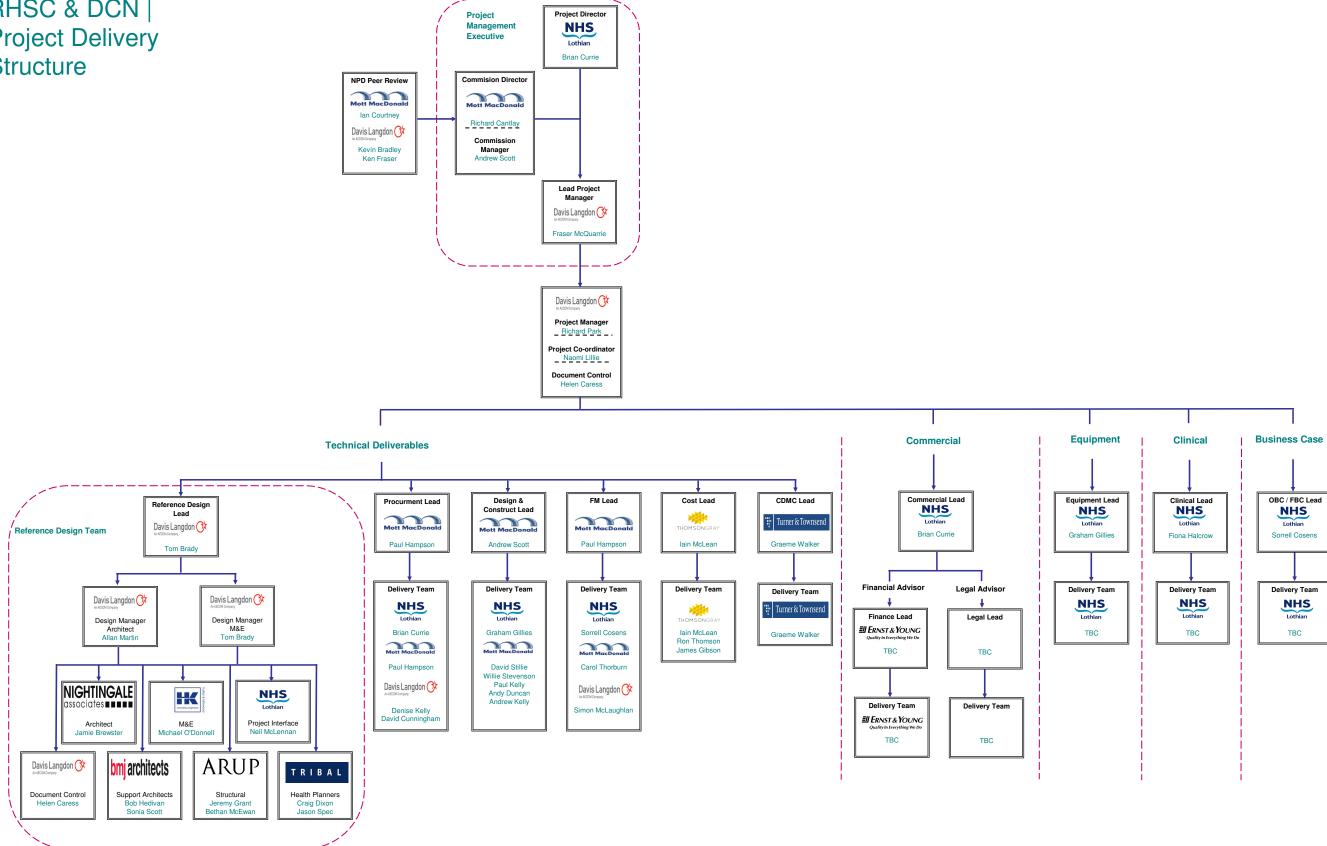




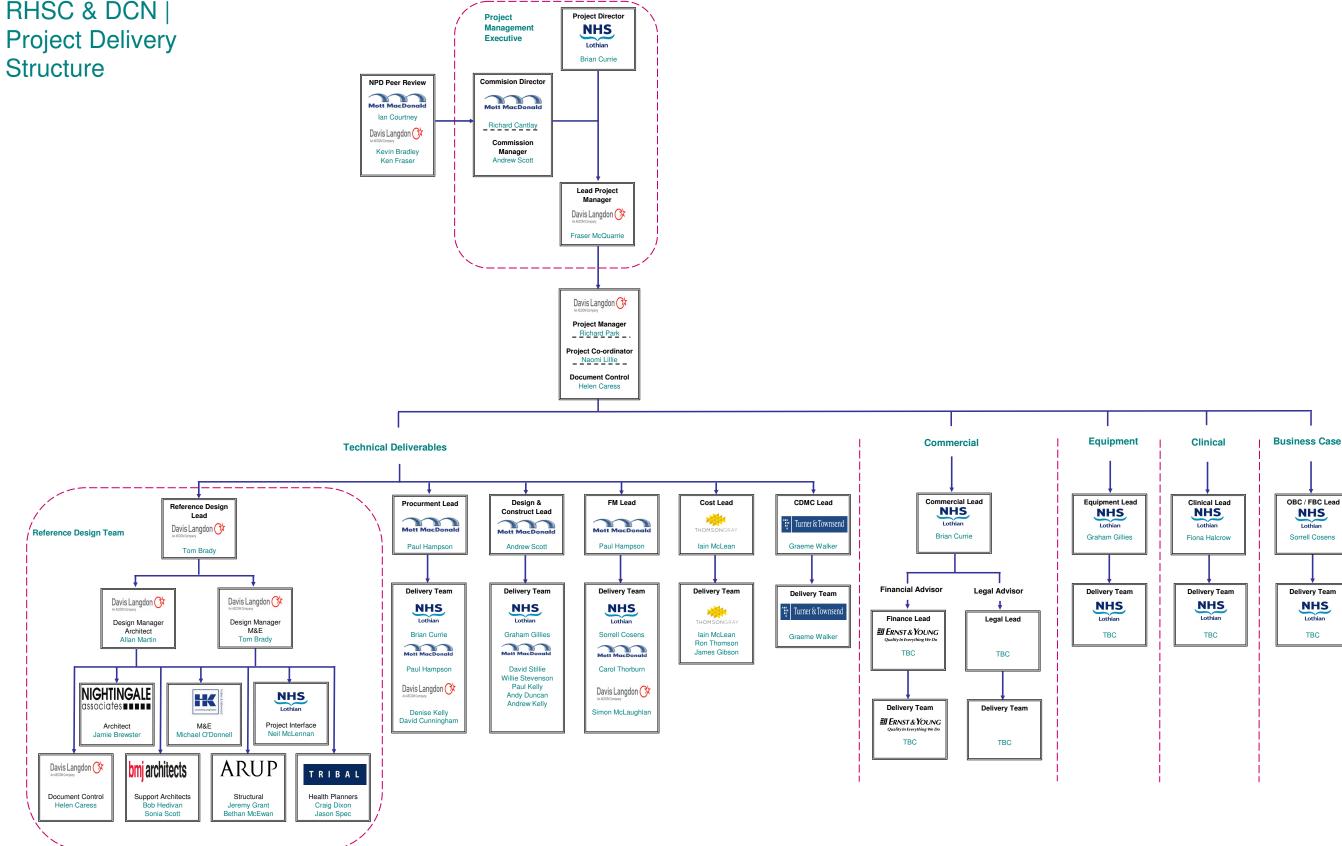
## Appendix N. Design Issues Tracker









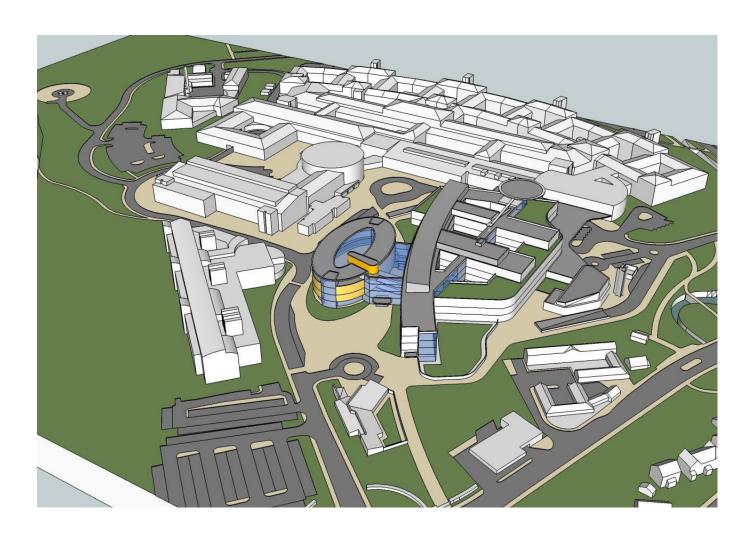






# Royal Hospital for Sick Children & Department of Clinical Neurosciences Project

## NHS Lothian



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To:
Subject: FW: Reference Design Paper
Date: 26 March 2012 15:50:06

Attachments: RHSC + DCN - Approach to Reference Design B Currie Mark Up 22 Mar 12.doc

#### Stephen

Can you have a look at this for me. We got a bit of a knock back on the Reference Design Paper from Brian Currie. Richard / I will deal with the main issues at the PME on Thu but could you look at Sections 5.3 + 5.4. I've attached a copy of Brian's mark-up but basically he is saying that he believes we are being a bit negative (and I do tend to agree with him). Could you have a go, as Richard has suggested in his note below, at recasting these two sections to give a more positive spin and link risks with suggested mitigation. The link to the current version of the paper is below.

RHSC + DCN - Approach to Reference Design: <<a href="http://pims01/pims/llisapi.dll/Open/1492511879">http://pims01/pims/llisapi.dll/Open/1492511879</a>>

The PME is Thu morning so if you could pull something together for us to review on Weds, that would be grand.

Give me a call if you need to discuss.

Regards

Andrew

----Original Message----From: Cantlay, Richard D Sent: 26 March 2012 15:34 To: Scott, Andrew G

Subject: Reference Design Paper

Andrew,

Have discussed this with Fraser and had further thought / review over the weekend.

Fraser reckons we should just discuss the big issue of whether we issue the whole paper or just part of it to SFT again at the PME / commercial meeting on Thursday. And ask Iain G to give us final instruction on what is needed.

The only other comments which Brian has made I think are on sections 5.3 and 5.4. He is worring we are being too defenxive. Perhaps the way to do it is set out eh key risks and say that the following approach is to address these key risks - what do you think? That's really what we are talking about and we cant be criticsed by the client for highlighting risks along with a way of dealing with them.

I would see this as a task you can ask Stehphen to do for you.

Thoughts?

Cheers

ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	Summary of Headings		_	
D9	Natural and artificial light		Scored	
D10	Construction Phasing Boundaries and Access		Scored	
D11	Vertical and Horizontal Movement Strategy and Proposals		Scored	
D12	Sustainability Proposals and Strategy		Scored	
D16			Scored	
D17			Coored	
D23			Pass / Fail	
D24	BREEAM		Pass / Fail	
D25	Post PB Stage Design Development Proposals		Pass / Fail	
D26	Design Programme to Financial Close		Pass / Fail	
			Pass / Fail	
	Evaluation Weighting / Ref  D1 D2 D3 D4 D5 D6 D7 D8 D9 D10 D11 D12 D13 D14 D15 D16 D15 D16 D17 D18 D19 D20 D21 D22 D23 D24 D25	Summary of Headings	Summary of Headings	Summary of Headings

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	D1	Stakeholder Requirements / Meeting Stakeholder Needs Bidders shall demonstrate how their design provides a healing environment that will assist NHS Lothian in its core obligation to deliver clinical care to users of the Facility, and how this need has been balanced by the potential conflicting requirement to provide a "non-institutional feel." In addition, Bidders shall provide an overview of how the proposals will deliver an environment that supports the well being of patients, staff and visitors. The needs of those with disabilities should be expressly addressed, along with other matters such as thermal comfort, air quality, lighting and security.  Bidders shall specifically include detailed references to external spaces proposed, and the incorporation of artwork	"Stakeholder Requirements / Meeting Stakeholder Needs" Report submission, complemented with drawings, illustrations, photographs etc. as required	Scored Very High	Need to get the wording of the requirement right. Should not be for the Bidders to 'demonstrate'. It should be self evident from their proposals.
	D2	Strategic Approach to Design Bidders shall present clearly their design analysis of both the site and NHS Lothian's requirements as depicted in the ITPD. The review of the site shall identify, as a minimum, opportunities, constraints and access and planning issues.  Bidders shall provide a clear statement relating to a full range of strategic issues and how the design proposals have dealt with these specific project issues, and any impact their proposals will have on such matters.	"Strategic Approach to Design" Report submission supported by reference to drawings and specifications	Scored High	Need to note that there are likely to be limited opportunities for layouts to be changed given the status of the Reference Design.
	D3	Architectural Strategy Bidders shall demonstrate how their proposals reflect good design practice in delivering Facilities that support NHS Lothian's clinical needs.  Details provided shall include, but not necessarily be limited to: How the Bidders have addressed the interests of stakeholders, including (but not limited to) clinicians, patients (and their representatives), health commissioners, Local Government, and the local community; Details of architectural quality and how this will be ensured; and Details of how art will be an integral part of the design solution.  NHS Lothian is keen to ensure the architectural quality of the buildings, the standard of finishes and the component parts are to a high standard. As well as the architectural drawings, Bidders shall provide specific details in pictorial format (which shall be relied upon at Preferred Bidder stage and during detailed design as representative of the standards to be adopted) on the following: Canopies; Internal and external doors and door furniture, also showing proposed pattern of vision panels; Reception desks and Nurse Stations; Floor and wall coverings; Lighting in key public areas; and Juxtaposition of main external finishes / cladding.	'Architectural Strategy' Report submission supported by and with references to submitted drawings/specifications and diagrams as appropriate. Photographs, brochure details and supporting text as appropriate, plus completed components schedule.	Scored Very High	This is a key area for consideration of quality.
	D4	Innovation Bidders shall highlight where it will be, or has been possible to provide innovative solutions to NHS Lothian's requirements. Any such areas identified shall be supported, where possible, with examples of a similar nature from other schemes, if indeed these exist.	"Approach to Innovation" or "Innovation in Solutions" Report submission	Scored Very High	This is a key area for consideration of quality.
	D5	Adaptability Bidders shall prepare an adaptability strategy to support their	"Adaptability Strategy"	Scored High	Likely to be v important to

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
		ITPD design proposals. This strategy shall describe in general terms what features have been incorporated related to future adaptation of use and / or expansion. In particular, reference shall be made to:  How the interior spaces may be re-arranged in future if a change of use were to occur;  How the building's services and external infrastructure have been designed to allow this adaptability;  How the building structure has been designed to allow this adaptability;			NHSL. Always an area where Bidders tend to dodge the issue. Need to get some commitment in proposals and should be easy to differentiate.
	D6	Way finding and Signage Bidders shall provide details of signage / way finding strategy, (which requires to be designed specifically to suit the needs of the particular patient mix for the Facilities).	"Way finding and Signage Strategy" Report submission	Scored High	This is an important aspect of the proposals being delivered – could need to integrate with the Art Strategy.
	D7	Interior Design Bidders shall provide outline/illustrative interior design proposals and illustrations for each distinct area of the Facilities, paying particular attention to the interior design solutions for public, patient and key staff areas.  Bidders shall also demonstrate specifically how their design addresses the requirement to provide a "light, spacious and welcoming atmosphere" with the main entrance being "immediately apparent".  Bidders shall demonstrate how the Interior Design proposal relate to the integration of art in the facility.	"Interior Design Proposals" Report submission and illustrations	Scored High	A key area of interest for the Board
	D8	M& E Engineering Service Design Proposals Bidders shall describe the engineering services design proposals for each element of the scheme in sufficient detail to show compliance with NHS Lothian's Construction Requirements, including but not limited to:  Engineering design, control and operational philosophy statement; Principal system selections; The definition of plant areas and zones both internal and external to the Facilities; and Schematic and written proposals for major plant provision.  Bidders shall provide an environmental conditions / room provisions matrix for both mechanical and electrical services for each room in the Facilities.  Whilst Bidders are required to undertake their own design, NHS Lothian has provided draft matrices as part of the ITPD. Bidders are required to complete their matrices in identical format, or confirm general acceptance of NHS Lothian's draft matrices, highlighting differences on an exception basis.  Bidders shall provide major plant life cycle statements, including an explanation of the Bidder's life-cycle philosophy to support the lifecycle costing analysis completed in the capital costs proforma.  Bidders shall provide evidence that the building services support NHS Lothian's business, safety and security and life critical services under supply failure scenarios. Specific details shall be provided relating to standby facilities and mains service redundancy.  Bidders shall provide proposals for external services, including details of the main routes (including proposed	Report submission and supporting information / drawings as appropriate, including completed schedules  Completed matrices with supporting commentary	Pass/ Fail or marked to relate to comfort	High as it relates to environmental comfort.

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
		connections to existing services), intakes and off-site reliance of the services.  Bidders shall confirm and provide detail relating to the main			
		source of heating energy.			
	D9	Natural and artificial light Bidders shall provide information relating to lighting within the Facilities. This shall include reference to the balance of natural and artificial light, a description of how the environment created by the lighting design will support the well being of service users, carers and staff, and the design strategy for external lighting bearing in mind potential light pollution issues for neighbours of the Facilities.  Bidders shall provide a detailed methodology on how they intend to maintain access, mains services etc. such that the ongoing services of the site's immediate neighbours may continue throughout the duration of construction.	Report submission, drawings and illustrations as appropriate.	Scored High	Tied in with interior design and an area for Bidders to indicate innovation.
	D10	Construction Phasing Boundaries and Access Particular attention shall be provided on construction phasing, site boundary treatments, vehicular and pedestrian access and the maintaining of existing car parking spaces, and shall highlight both safety and operational matters.	Report submission supplemented by site plans, phasing diagrams etc.	Scored High	A sensitive are of key importance to the Board.
	D11	Vertical and Horizontal Movement Strategy and Proposals Bidders shall provide a lift and materials traffic assessment. When selecting lift locations, number and sizes of cars etc, specific consideration shall be given to wheelchair users and others with disabilities that will use the Facilities. Specific consideration shall be given to the incorporation of fire fighting lift(s) to maintain evacuation use for the disabled in an emergency situation.	Report submission	Scored Medium	Key information for circulation and Operational Functionality
	D12	Sustainability Proposals and Strategy Bidders shall provide an energy management strategy, including the approach to sustainable development.  Bidders shall confirm design water and energy consumption targets for the building (heating and power), in a month by month schedule over the course of a 12 month period.  Bidders shall provide an analysis of Project Co's design solution conformance with the performance energy targets.	Report submission	Scored Medium	Important that this is assessed and that Bidders give due attention to this important aspect.
	D13	ICT Strategy and Proposals Bidders shall provide a statement of understanding relating to NHS Lothian's requirements with respect to IM&T / Combined Communications.  Bidders shall provide a detailed methodology for ensuring compliance with NHS Lothian's requirements, defining clear interfaces of responsibility as necessary, and how they will take overall responsibility for the coherence and compatibility of systems such that they will operate to suit NHS Lothian's needs.  Bidders shall provide a schedule of issues, if any, that will require detailed resolution with NHS Lothian at Preferred Bidder stage in order to complete the design.  Bidders shall highlight within their proposals the number, location size and specification of IT / Communications rooms.	Report submission  Drawings with supporting commentary	Scored Low	Could almost be a Pass Fail given the limited scope for innovation.
	D14	Development of Construction Requirements and Derogations NHS Lothian is receptive to potential	Written statement supported by schedule of	High Pass/ Fail	An area for Bidders to

ITPD Element ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	amendments to their Construction Requirements if there is a clear benefit to be derived from this (including value for money), that clear alternatives are proposed, and that those alternatives do not detract from providing NHS Lothian with high quality Facilities consistent with their output requirements.  Bidders shall confirm their acceptance to compliance with NHS Lothian's Construction Requirements as part of their ITPD submission. If there are specific areas of NHS Lothian's Construction Requirements that Bidders will not accept, or if they propose alternative standards, these shall be scheduled and provided in support of the statement.	potential derogations from NHS Lothian's requirements  Report submission		show some innovation
D15	Construction Strategy, Proposals and Method Statements. Bidders shall outline their construction proposals in sufficient detail to demonstrate the deliverability of the development. Within the scope of the proposal, Bidders shall address in detail how the construction phase of the project will be managed.  Bidders shall provide:  Confirmation that they will complete the construction phase in accordance with the requirements of BS EN ISO 9001 or 9002 or any equivalent standard; Details of proposed QA/QC systems (i.e. a system synopsis);  Where individual quality and environmental management systems of the designers, contractor, service provider and Project Co are to be used, a statement regarding how these separate systems will be integrated to form a coherent overall quality management system. For the avoidance of doubt, NHS Lothian requires Project Co (in addition to their sub-contractors) to adopt and implement a compliant system;  Details of their approach for monitoring quality during construction (this may be by reference to a similar system implemented on a similar scheme);  Details of their approach for auditing Project Co the quality and environmental management systems. This shall include details of the independent, internal and external audits of Project Co and its sub-contractors;  Details of their approach to developing the quality and environmental management systems, including key dates; and  A description of how the proposed systems will integrate with their strategies for risk mitigation.  Bidders shall review NHS Lothian's proposed procurement and implementation timetable and key milestones and provide a statement confirming the Bidders' ability to meet its requirements.  NHS Lothian's output specification requires that Facilities are handed over to NHS Lothian, on completion of the construction, at an acceptable standard of clinical cleanliness for each area. Project Co shall be responsible for undertaking this obligation, and as such Bidders shall include within their response how they propos	Report submission	Scored High	Requirement here seems to be a bit weak. Need to lead the bidders a bit more so that their response to dealing with the complexities of the site is sought.

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	D16	Construction Health and Safety Strategy, Proposals and Methodology.  Bidders shall provide details of their health and safety management system to be implemented including the key dates for its development.  Bidders shall identify the potential constraints on their construction activities when considering the safety and other needs of their immediate neighbours and other members of the public that may be affected by the works. Bidders shall outline in detail how any risks to health and safety will be managed and mitigated throughout the construction phase.  Bidders shall provide a detailed methodology for how they plan to deal with the potential occurrence of below ground services crossing the site, in addition to the removal of other below ground obstructions that may still be present from previous demolition works.  Bidders shall outline proposals to create a "zero defects" culture with respect to the works in order to deliver the scheme with few or no snagging items at Actual Completion Date. In addition, Bidders shall also outline how a contingency plan of investigating and rectifying any defects which could still occur despite all best endeavours of the contractor.	Report submission	Scored High	Requirement here seems to be a bit weak. Need to lead the bidders a bit more so that their response to dealing with the complexities of the site is sought.
	D17	Commissioning and Handover Strategy and Proposals. Bidders shall provide a statement outlining the key elements of the commissioning programme for the Facilities, including the management of interfaces with NHS Lothian.  Bidders should provide a statement detailing the Bidder's general approach to Facilities handover including how they would propose to interface and assist NHS Lothian with their decanting, familiarisation and training for the Facilities and proposals on how they would work closely with NHS Lothian in developing an occupation plan.  Bidders should provide an outline commissioning programme, supported by a methodology of how this will be developed and agreed in conjunction with NHS Lothian.	Report submission Outline commissioning programme	Scored Low	Needs to be thought through in relation to the interfaces with RIE
	D18	Planning Permission Bidders shall provide evidence of planning support for their design proposals including but not necessarily limited to: Evidence that the proposals comply with the policy of the local planning authority and the requirements of the Development Brief; Approach to the consultation process; Approach to ensuring "good neighbourliness"; and Evidence of discussions and agreements with the local planning authority sufficient to indicate that the granting of approvals for the scheme will be achieved in the Preferred Bidder stage. Any perceived obstacles / project risks in this regard shall be clearly drawn to NHS Lothian's attention.	"Planning Permission Status" Report submission including supporting evidence.	Pass / Fail	Bidders will not get a commitment from Planning however it is ultimately their risk – so Pass / Fail?
	D19	Schedule of Accommodation Bidders shall provide a Schedule of Accommodation showing net room areas (finished wall surfaces) and gross departmental areas in m². These are to be set out in the same format as the Schedule of Accommodation included within Volume 3a of this ITPD.	Schedule of Accommodation	Pass / Fail	Link to Ref Design

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	D20	Fire Strategy Bidders shall provide strategic fire strategy plans at an appropriate scale highlighting fire compartmentation, horizontal and vertical evacuation strategies and detailing the implications of this proposed strategy on staff and users in the event of a fire. Bidders shall demonstrate within their strategy that the proposals comply with Firecode, SHTM 81 and the current Building Standards. Bidders shall detail how the fire strategy issues at the Link with the RIE are to be addressed.  Bidders shall provide details of external and internal access and circulation routes, including a safety and security statement for each element of the scheme.	"Fire Strategy Report" 1:200 Drawings with supporting text and diagrams as appropriate	Pass Fail	
	D21	Structural Design Proposals Bidders shall provide a statement of the structural design philosophy.  Bidders shall provide details of their proposals for coordinating structure with space requirements and distribution of services.  Bidders shall detail the proposed type of structure, including but without limitation:  Substructure proposals;  Structural frame solution, including grid arrangements;  Ground, suspended floor slab and roof construction;  External wall and internal partition construction;  Fire protection strategy and proposed methods to be adopted; and  Methods for dealing with floor penetrations both during new build works and to accommodate future potential needs.  Bidders shall provide a schedule and/or drawings demonstrating the dead and imposed loading design criteria (both uniformly distributed and concentrated loads) adopted for all areas of the Facilities.  Bidders shall provide specification of construction and materials to be utilised in the hard external works e.g. roads, pavements etc.  Bidders shall provide a detailed description of the design of the drainage system, taking into account matters such as the design itself, allowable discharge into the public sewers, the need or otherwise for surface water attenuation and the incorporation of drainage to existing buildings within the site drainage proposals.	"Structural Design Proposals" Report submission Specifications Report submission and drawings	Pass / Fail	This is important for the appearance of the external treatments.
	D22	Services, Utilities and Infrastructure Report Bidders shall provide details on the proposed mains service infrastructure strategy for the sites, defining principal service routes external to the buildings.	Report submission and drawings	Pass /Fail	
	D23	AEDET Report Bidders shall provide, in support of their design submission at ITPD, a draft AEDET assessment of their proposals, with supporting commentary.  Where assumptions with respect to certain elements within these assessments have to be made (i.e. such details that would ordinarily be developed during the Preferred Bidder or post Financial Close period) the basis for these assumptions shall be stated.	Assessment proforma with supporting commentary	Pass / Fail?	

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	D24	BREEAM Bidders shall provide, in support of their design submission at ITPD, a draft BREEAM assessment of their proposals, with supporting commentary.  Where assumptions with respect to certain elements within these assessments have to be made (i.e. such details that would ordinarily be developed during the Preferred Bidder or post Financial Close period) the basis for these assumptions shall be stated.	Assessment proforma with supporting commentary	Pass Fail	
	D25	Post PB Stage Design Development Proposals Bidders shall describe the approach to be adopted to manage the design process during the Preferred Bidder Stage and up to and beyond Financial Close (taking account of the design review procedures to be implemented). Bidders shall within the above description include particular reference to the following:  Further development of 1:500, 1:200 and 1:50 design drawings and other design details (including Room Data Sheets) and how these will be developed in conjunction with NHS Lothian's Project Team, user groups, specialist advisers and other project stakeholders, to achieve sign off to the proposals;  Further development of the specifications and engineering related drawings and how these will be developed in conjunction with NHS Lothian's Project Team to achieve sign off of the proposals;  The anticipated level of involvement that NHS Lothian will have in the design development process, and the number of main design iterations anticipated;  Outline proposals for change control, confirmation of technical queries and other design related management tools;  Approach to procuring detailed planning permission; and Further development of interior design proposals to the satisfaction of NHS Lothian, patient groups, etc.  The programme shall also demonstrate how and when sign off of NHS Lothian's Construction Requirements will be achieved in this period by the Preferred Bidder, and how this sign off relates to development and sign off of Project Co Proposals.  Specific areas of design development may require employment of additional specialists over and above those consultants identified in the consortia core team. Where it is proposed additional specialist support will be required, the identity and credentials of proposed organisations shall be provided.	Report submission	N/A?	N/A on the basis that the majority of this work will have been completed as part of the CD process.
	D26	Design Programme to Financial Close Bidders shall supply their envisaged design programme to Financial Close and thereafter to design completion. This shall show the proposed programme for the development of the design drawings and specifications (supplemented by samples and models as appropriate) and other technical schedules to the Project Agreement, shall clearly indicate the expected number of design drawings and specifications, and shall also clearly define periods allowed for NHS Lothian consideration of proposals.	Programme supported by written commentary	Pass / Fail	

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	D27	Summary Assumptions, Clarifications and Qualifications NHS Lothian encourages Bidders to enter into, and maintain, detailed dialogue on any scope of the Project that the Bidders feel is not sufficiently defined, or for which NHS Lothian/Project Co obligations are not clear. This is encouraged throughout the ITPD Period, and will continue to be encouraged post appointment of Preferred Bidder.  For the purposes of Bidders' ITPD submissions, Bidders shall provide a consolidated schedule of all assumptions, clarifications and qualifications made in respect of their ITPD Bids. Whilst it is encouraged that such references are also made in the appropriate locations throughout Bidders' submissions, it is a mandatory requirement of the ITPD submission that all such matters are also summarised in a single location.  If elements of the proposals costed at ITPD stage are subject to further clarification and /or survey work during the	Schedule of assumptions, clarifications and qualifications.	Pass / Fail	Not applicable if proposals fully developed during CD process?
		Preferred Bidder period, which may then lead to a request for a price increase over and above that submitted for ITPD, these elements shall be highlighted by the Bidders within this schedule.			
	D28	Life Cycle Replacement Strategy and Proposals. Bidders shall provide a schedule of design life proposals against the elements listed in the ITPS	Schedule	Pass / Fail	
	D29	Approach to Equipment - Strategy and Proposals Bidders shall price for the indicative list of equipment included within the draft Schedule 13 of this ITPD documentation.  Bidders shall provide a commentary on how closely the equipment scheduled by the Board varies from their own assessment of equipment needs, and the order of magnitude price differential (if any) between the two.  Bidders shall provide a commentary on any aspect of the proposed equipment supply, fix, maintain and replace regime	Report submission and priced schedule	Pass / Fail	Could split this so that an area where Bidders show innovation in relation to equipment could be marked.
		suggested in this ITPD that is not considered to represent best value to the Board, and suggest any alternative profiles of responsibility, if any, that may enhance this.  Bidders proposals should cover how it plans to select equipment suppliers and how its purchasing arrangements will ensure value for money.			
	D30	CDM-C Bidders shall provide a detailed commentary on how they propose to comply with the requirements of the Construction (Design and Management) Regulations 1994. Particular reference shall be made to Project Co's role as Client, in addition to proposals to cover discharging the duties of Planning Supervisor, Designer and Principal Contractor under the Regulations. Bidders shall also outline the methodology to deal with potential commercial and other conflicts between their constituent parts with respect to compliance with the Regulations.	Report submission	Pass / Fail	

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	D31	Construction Programme Development and Monitoring Bidders shall provide a high level programme, for the Works, comprising a network and linked bar chart programme covering all of the main and key elements of design and construction, covering the period from Financial Close to post-completion commissioning.  As a minimum, the programme shall show the following information:	Programme and Method Statement	Pass / Fail	
		Sequencing of activities showing logic links, restraints and constraints;			
		Key activity durations;			
		Critical paths, including the identification of critical dependencies of activities and float;			
		Key and other target milestones;			
		Planning approval, and other statutory consents; and			
		Proposed service transfer dates.			
		Bidders shall provide a statement on how they would manage and monitor the programme, including their approach to minimising the effects of delays and unforeseen circumstances.			
	D32	Programme during the Preferred Bidder stage Bidders should provide a statement detailing how they propose to develop the high level programme during the Preferred Bidder stage.	Report submission	Pass / Fail	
	D33	Technical Cost Proforma Bidders shall complete the technical cost proformas contained in the ITPD, and issued to Bidders in MS Excel format. Bidders' completed proformas shall also be provided in the same MS Excel format to allow direct comparison between bids.	Completed MS Excel spreadsheet	Pass / Fail	Will by implication be included in the financial evaluation.

ITPD Element	ITPD	Bid Response Requirement	Format	Scoring	Comments
TIPD Element	Evaluation Weighting / Ref	Did Response Requirement	Format	Approach	Comments
	D34	Drawings	Drawings at following	Pass Fail	This is
		Bidders shall provide a sufficient number of plans, to a sufficient level of detail, within their ITPD submission for NHS Lothian to fully understand the design proposals. To allow flexibility to best describe the Bidders' individual proposals, appropriate drawing scales may be selected by the Bidder. It is envisaged that the package of drawings shall cover, as a minimum, the following details:  Site analysis (refer D4 above);]  Development control plan(s) demonstrating building details, proposed vehicular and pedestrian access/egress locations to the sites, proposed external vehicular and pedestrian circulation arrangements, proposed locations of car parking including number of spaces in each location, proposed future expansion zone(s) and in addition the	scale and supporting text		effectively the Ref Design
		retention/loss balance of the protected trees on the site;			
		Departmental adjacencies;			
		Departmental layouts, room adjacencies and sizes;  1:50 fully loaded room layouts are required for the following			
		areas. These should portray room plans showing doors, windows and the principle fitments, furniture and Equipment. Room layouts submitted should also portray room elevations, reflected ceiling plans and all engineering services terminals;			Comme
		Areas Required:			the inform
		Single Inpatient Bedroom (Standard) with Ensuite			
		Twin Inpatient Bedroom with Ensuite			
		Standard Consulting Room (Outpatient)			
		GP Consulting Room			
		Standard Treatment Room			
		Clean Utility			
		Dirty Utility			
		Assisted Bathroom			
		Gymnasiums			
		Sections through the building with clear floor to ceiling heights, service and structural zones, and construction depths supported by a statement highlighting changes to the sections in other (not drawn) areas; and External landscape / therapy garden spaces.			
		[To be included in list of information to be indicated on drawings. Supplemented with notes if required.] Bidders shall include within their submission proposed key internal design dimensions including but not limited to the following:			
		Clear floor to ceiling heights;			
		Above ceiling service height allowances; Clear wall to wall corridor widths; and			
		Door widths.  It is permissible to respond to this query identifying general			
		allowances made, supplemented with proposals for specific and identified exceptions, and/or by annotating schedules of accommodation as appropriate. In addition to the above, Bidders shall indicate all proposed corridor widths on the departmental plan drawings.			
		[Include in drawings requirements] Bidders shall provide plans highlighting in detail the provision and location of non-clinical service facilities, in particular highlighting how the non clinical process flows defined in NHS Lothian's brief have been translated into the design.			
		Bidders shall provide schematic line drawings which provide sufficient detail to understanding the strategic distribution of engineering services, the general routing including via service risers and ducts and the zoning philosophy for the building.			

ITPD Element	ITPD Evaluation Weighting / Ref	Bid Response Requirement	Format	Scoring Approach	Comments
	D35	Specifications Bidders shall provide specific details on their proposed suite of specifications for the Works. These details shall include, but not be limited to the following:			
		The industry recognised specifications proposed, with specific commentary on the extent of application of those to each main discipline (civil / structural, M&E, architectural etc);			
		Inclusion of either Project specific specifications for each main discipline, or example specifications used on other projects that are representative of the level of detail and clearly demonstrate the proposed level of quality that will apply to this scheme: and			
		A statement confirming that all such specifications (including fully completed framework specifications) will be fully drafted by the Preferred Bidder prior to Financial Close.			
		For the avoidance of doubt, NHS Lothian is expecting Bidders to adopt both general, and where required, specific specifications to cover all components, materials, workmanship etc. For example the NBS framework could be utilised for mainstream building elements, however may need to be supplemented by specific standards and specifications relevant to particular Bidder proposals (e.g. piling, steelwork erection, infrastructure works).			
		Recognising that the level of detail provided in Project Co Proposals at Financial is related to the schedule of Reviewable Design Data contained in Part 10 of the Schedule to the			
	D36	Construction Method Statements			
	D8	Bidders shall provide a summary of key operating assumptions for each clinical department, highlighting any proposed amendments to NHS Lothian's brief requirements.	Report submission with supporting drawings as appropriate	N/A – delete?	Given that we have Ref Design
	D23	Bidders shall confirm acceptance of NHS Lothian's position relating to risk allocation on energy consumption and pricing.	Schedule	Pass / Fail	Include under Commercial and Legal

#### **NHS LOTHIAN**

#### FINANCE & PERFORMANCE REVIEW COMMITTEE

Minutes of the Meeting of the Finance & Performance Review Committee held at 9.00am on Wednesday, 18 April 2012 in Meeting Room 7, Waverley Gate, 2-4 Waterloo Place, Edinburgh.

**Present:** Mr G Walker (Chair); Mr R Y Anderson; Mr A Boyter; Dr M Bryce; Mr R Burley; Mr E Egan; Dr D Farquharson; Mrs S Goldsmith; Professor J Iredale; Mr P Johnston; Mrs J K Sansbury and Mr I Whyte.

**In Attendance:** Mr B Currie; Mr P Gabbitas; Mr I Graham; Mr A Notman; Mrs C Potter; Mr P Reith and Mr S Wilson.

Apologies for absence were received from Professor J J Barbour, Councillor P Edie, Mrs M Hornett, Dr A K McCallum and Dr C J Winstanley.

#### **Declaration of Financial and Non-Financial Interest**

The Chair reminded members they should declare any financial and non-financial interests they had in the items of business for consideration, identifying the relevant agenda item and the nature of their interest. There were no declarations of interest.

## 1. Minutes of the Previous Meeting

1.1 The previously circulated Minutes of the meeting held on 8 February 2012 were approved, subject to the following amendment:-

Minute 67.7 to read "Mr Whyte commented that an emergency team was now in place in East Lothian to work jointly with the Community Health Partnership and the local authority while going into people's homes to enable them to be discharged at as early a stage as possible."

## 2. Matters Arising

2.1 Relocation of the Psychiatry of Old Age Ward from the Royal Victoria Hospital to the Royal Edinburgh Hospital – Mrs Goldsmith advised the Committee that the report on whether the proposed solution fitted in with the Clinical Strategy, or whether the additional funding should be used to provide extra clinical capacity at the Royal Infirmary of Edinburgh, would be finalised after discussions being held at the start of May.

SG/JKS

- Shared Services Mr Boyter spoke to a previously circulated report providing an update on all the known and emerging areas of work within the umbrella of "shared services", specifically focussed on the forward plan and recommendations for deploying resources to convert potential opportunities into gains during the fiscal year 2012/13. Mr Boyter advised the Committee that the scoping work had now been completed and work was progressing on the development of the workplan. Mr Aitken, formerly Acting General Manager of Edinburgh Community Health Partnership, had been appointed to take this work forward. The Committee agreed to note the position outlined in the circulated report.
- 2.3 Royal Hospital for Sick Children and Department of Clinical Neurosciences Project Update - the Committee received a previously circulated report giving an update on progress since the meeting on 8 February 2012. Mr Currie gave a presentation outlining the procurement process overview, the pre-qualification process, the invitation to participate in dialogue and the procurement resources and workload. Mr Currie explained that up to three parties deemed to be of sufficient technical and financial standing and best placed to deliver the requirements of the contract, would be shortlisted. Once these procedures had been gone through, the three bidders would enter the dialogue phase over an 8-month period, after which a final tender would be invited and submissions fully evaluated. The preferred bidder would be selected on the basis of this evaluation, which would not be solely about price as the Scottish Futures Trust had recommended that the evaluation be on the basis of 60% price and 40% quality. Mr Currie re-assured the Committee that the reference design would already have ensured that quality was built into the selection of parties shortlisted. Once the preferred bidder had been selected, the most economically advantageous tender would be selected at the final stage with the involvement of the core evaluation team, core evaluation advisers and evaluation support lead, including technical, financial and legal support. These would also be involved together with the bidder, the Scottish Futures Trust and the Scottish Government in the competitive dialogue engagement.
- 2.3.1 Mr Burley asked why the Scottish Futures Trust should determine the split between price and quality and Mr Currie advised that as the Scottish Futures Trust would be providing 85% of the revenue funding, they had a major interest in this and there was an expectation that ensuring that the correct quality criteria were used would ensure that the importance of quality was already built in. Mrs Sansbury reminded the Committee that as a reference design had already been produced, quality had been built into this which the winning bidder could not change.
- 2.3.2 Mr Egan questioned the source of the additional £1m funding required and Mrs Goldsmith advised that it would come from NHS Lothian's NHSScotland Resource Allocation Committee allocation. Mr Egan queried how price inflation had been captured and whether NHS Lothian would be liable for increased costs because of the 4-year delay brought about by changes in Government funding policy. Mrs Goldsmith advised that NHS Lothian would only be responsible for 15% of the cost; otherwise the additional funding would be obtained through the Scottish Futures Trust. Mrs Goldsmith reminded the Committee that the reference design was part of the capital costs and not

funded from revenue. Mr Egan commented that the delays to the new Royal Hospital for Sick Children and Department of Clinical Neurosciences had come about because of the Government imposed new funding model and NHS Lothian was not to blame for these delays.

- 2.3.3 The Committee agreed to note the position with the City of Edinburgh Council Planning Department approvals process and the Supplementary Agreements with Consort Healthcare; agreed the membership of the core evaluation team outlined in the paper; agreed the proposed scheme of delegation for the non-profit distribution procurement process outlined in the paper and agreed to note the budget position for the resources required for the delivery of the project.
- Suicide, Attempted Suicide and Self-Harm Dr Farquharson introduced a previously circulated report providing further information on figures in relation to the target for the reduction of suicides that had been considered as part of the performance report. Dr Farquharson advised that based on 3-year rolling averages between 2000-2002 and 2008-2010, there had been a 14% fall in suicide rates overall. The national target was to reduce the suicide rate in Scotland by 20% between 2000-2002 and 2011-13. The 2006-2010 5-year rates were for both genders and all Lothian local authority areas were lower than the Scottish average and lower than the previous 5-year rates, reflecting the national decline in the suicide rate. Dr Farquharson advised that the approach used in NHS Lothian was in line with that described by NICE which was mirrored in College advice from the Royal College of Psychiatrists and the British Association for Emergency Medicine.
- 2.4.1 Mr Whyte commented that the police had difficulties in confining a person in a cell who threatened self-harm and Mrs Sansbury commented that there were legal constraints on who the NHS could retain in secure units. Professor Iredale commented that this was likely to be a perpetual gray area. The Committee noted the position.
- 2.5 Development of a Surgical Assessment Unit at the Royal Infirmary of Edinburgh - Mrs Sansbury introduced a previously circulated report commending the approval of the change of use of the newly build observation ward into a surgical assessment unit within the emergency department at the Royal Infirmary of Edinburgh. Mrs Sansbury explained that the project had taken significantly longer because it had been one of the first supplementary agreements with Consort. The original Outline Business Case had been for an observation ward at a capital cost of £1.3m but with no revenue requirements. In March 2011, the Scottish Government Health Directorates Emergency Access Support Team had undertaken a diagnostic visit to NHS Lothian following an invitation from the Division to provide support and expertise to help NHS Lothian to achieve and maintain compliance with the 4-hour standard. The Emergency Access Support Team report had not supported the construction of an observation ward at the Royal Infirmary of Edinburgh site and, following their recommendations, the University Hospitals Division Senior Management Team took the view that whilst the project should be completed, the function of the facility should be reviewed in the light of these recommendations. The Senior Management Team subsequently recommended that the Division support a unit to enable increased streaming of

- surgical assessment patients to relief capacity pressure within the emergency department and the combined assessment area.
- 2.5.1 Mrs Sansbury advised the change in function from observation unit to surgical assessment function had a revenue consequence of £283,000 associated with the additional staffing and £130,000 for non-pay revenue costs. These revenue costs would be covered on a non-recurring basis from the University Hospitals Division reserves until the Capita bed modelling work, which had been commissioned by the Improvement Care, Investing in Change Board, was completed, at which time a more sustainable solution to funding the shortfall would be introduced.
- 2.5.2 Mr Johnston commented that he was concerned about the process that had led to these changes and sought assurances that lessons had been learned from this exercise. Dr Bryce sought re-assurance on the quality of care of patients and Professor Iredale emphasised the importance of establishing an imaginative way of using the unit. Mrs Sansbury explained that the Division now had a much better understanding of the process of supplementary agreements with Consort.
- 2.5.3 The Committee agreed to support the development of a surgical assessment unit at the Royal Infirmary of Edinburgh and that the revenue consequences would be funded from University Hospitals Division non-recurring funds until the implementation of the Capita bed redesign. The Chair commented that the process issue of regular reporting on Business Cases would be dealt with at another point in the meeting.

#### 3. Financial Plan 2012/13 to 2016/17

- 3.1 Mrs Goldsmith introduced a previously circulated report providing an update on the financial plan for 2012/13 and an overview on the plan for 2013/14 and beyond.
- 3.2 Mrs Goldsmith commented that the financial plan had been discussed in detail at the Executive Management Team and money had been set aside for rebalancing care between primary care and hospitals.
- 3.3 Mr Egan expressed concern about the impact of increasing Local Reinvestment Plan targets. Mrs Goldsmith explained that there was some slippage every year on allocations, Financial plan developments and in other areas. These could add up to 1% of the Board's budget and these were generally held to offset any slippage on LRP delivery In 2011/12 all targets had been delivered and an underspend had been banked with the Scottish Government.
- 3.4 Mr Egan queried whether there were any plans for Communications to capture ideas from staff on ways to achieve Local Reinvestment plan targets and publicise the importance of the Local Reinvestment Plans and the Chair commented on the opportunity cost of the underspend and the need to explain this to staff.

SG

- 3.5 Mr Wilson advised that there was a plan being developed for increased communications with staff with internal publicity.
- 3.6 Mrs Potter reminded the Committee that the financial position reported was only to the end of February and undertook to liaise with Mr Wilson on providing simplified details of the financial position for staff.
- 3.7 Mr Whyte commented on the need for the future planning of community services and Mrs Goldsmith advised that Community Health (and Care) Partnerships needed to come forward with details of what required to be done, particularly in trying to support people coming out of hospital.
- 3.8 The Committee agreed to approve the financial plan for 2012/13 and submit the financial plan to the meeting of Lothian NHS Board on 23 May 2012 for formal approval.

#### 4. NHS Lothian 2012/13 Local Re-Investment Plan

- 4.1 Mrs Goldsmith introduced a previously circulated report providing an overview of the 2012/13 Efficiency and Productivity Workstream Framework and the progress made to date in developing local re-investment plans to meet the 2012/13 target. Mrs Goldsmith advised the Committee had expressed concerns about the Local Reinvestment Plans for 2011/12 and she intended to take a more strategic approach to the Local Reinvestment Plan for 2012/13.
- 4.2 Mr Egan commented that whilst improvements were not yet being seen in acute flow and capacity management, the progress of the Local Reinvestment Plans itself was a good news story.
- 4.3 Mr Johnston welcomed the commitment to move away from a "salami slice" approach and suggested more detail would be required to demonstrate that the agreed strategic direction was being followed.
- 4.4 Professor Iredale advised that issues relating to the redesign of services would go through the Service Redesign Committee for scrutiny.
- 4.5 Mrs Sansbury assured the Committee that workstreams in NHS Lothian mirrored the rest of those in Scotland.
- 4.6 The Chair suggested that some of the areas of the Local Reinvestment Plan could be looked at in greater detail by the Committee once the critical work on the Royal Hospital for Sick Children and Department of Clinical Neurosciences development had been completed.
- 4.7 Dr Bryce queried whether there was any way of rewarding and incentivising staff and Mr Boyter advised that non-pay means of recognising the contribution made by staff were being examined. Pay constraints reduced the options for financial reward.

- 4.8 Mr Egan commented that there used to be a Local Reinvestment Plan scheme where those who made the greatest savings could re-invest some of those savings locally.
- 4.9 The Chair advised that a report outlining the options available should be brought back to the Committee and Mr Boyter undertook to bring such a report through the Finance & Performance Review Committee or the Staff Governance Committee and Mrs Goldsmith undertook to come back to the Committee with a timeframe.

  AB/SG
- 4.10 The Committee agreed to note the progress made in the implementation of a whole system workstream approach to the delivery of the local re-investment plan in 2012/13 and note the level of the local re-investment plan which had been identified to date.

# 5. Capital Investment Programme

- 5.1 Mrs Goldsmith introduced a previously circulated report providing the Committee with an overview of the draft 3-year capital plan for 2012/13 to 2014/15.
- 5.2 Mrs Goldsmith advised the Committee that the Scottish Government was pushing towards the use of Hubco as a source of revenue funded capital expenditure. Capital investment had been reduced this year as overall funding had been reduced.
- 5.3 Mr Egan asked what was being done about backlog maintenance, in particular with respect to statutory standards that NHS Lothian was not going to meet.
- 5.4 Mrs Goldsmith advised the Acting Director of Facilities was ensuring the funds available for maintenance were spent in the most critical areas.
- 5.5 The Chair queried whether information was provided by Consort on the amount spent on maintenance. Mrs Sansbury advised information was provided on how the money paid to Consort was spent. Mrs Sansbury undertook to provide a report to the Committee detailing maintenance expenditure on the Royal Infirmary of Edinburgh.
- 5.6 Mr Anderson queried how the funding for the Hub South East Scotland enabling works was provided and Mr Graham advised that the Scottish Government made the funding available.
- 5.7 Mr Johnston commented that investment was required into ward 19 at the Royal Infirmary of Edinburgh but was not referred to in the paper. Mrs Goldsmith advised that this would be part of the base level of investment and was, therefore, already covered.

- 5.8 The Chair queried whether plans would be brought forward to ensure NHS Lothian obtained its share of investment from the Scottish Government and asked for clarification on what action was being taken and what re-assurance could be provided by the Scottish Government.
- 5.9 Mrs Goldsmith advised that the national allocation of capital would be concentrated for the next 3 years on the redevelopment of the Southern General Hospital in Glasgow and other NHS Boards would receive a smaller share of capital investment. Mrs Goldsmith undertook to bring back a report to the Committee with proposals on how NHS Lothian should deal with this and advised that she would be flagging up future Business Cases and investment required.

SG

5.10 The Committee agreed the draft capital plan for 2012/13 to 2014/15, noting that the timing of capital projects not yet fully approved would require to be managed to ensure delivery of a balanced position in 2012/13; agreed that the risks set out were to be incorporated in the corporate risk register and agreed to submit the capital plan to Lothian NHS Board for approval on 23 May 2012, subject to changes reflecting concerns about the achievement of statutory standards and the inclusion of a section detailing works that would not be undertaken and how the project has been prioritised.

SG

## 6. Labour Ward Update Project at St John's Hospital

- 6.1 Mrs Sansbury introduced a previously circulated report giving an update on the preferred approach to managing the project to upgrade the St John's labour ward, which would involve decanting this service into ward 20 (the Burns Unit) at St John's Hospital in order to sustain normal clinical service levels in the West Lothian maternity service throughout the project period.
- 6.2 Mrs Sansbury advised that the original plan to close half of the labour suite at a time, to carry out the upgrading works in two phases would take longer and be more disruptive, as well reducing the delivery service for West Lothian mothers for at least 9 months. In addition, the Healthcare Environment Inspectorate risks associated with trying to maintain half the service in the labour suite whilst building work was in progress would be very significant, as would the risks for the contractor in keeping the unit working in a safe environment.
- 6.3 The best decant options in St John's had been identified as ward 20, the Burns Unit, which had its own integral theatre and a direct lift which could be designated solely for the maternity service, as well an existing ward lay out and room size which would allow the maternity service to function at its current levels.
- 6.4 Mrs Sansbury advised the demand for the Burns Unit was significantly reduced as fewer burn cases were occurring nationally due to a number of factors. This meant that the Burns Unit could be moved to a currently vacant area in ward 19 and which was adjacent to the Plastic Surgery inpatient area. The move of the Burns Unit from ward 20 to ward 19 would free up ward 20 once the labour suite moved back out for alternative longer term use. Options could include turning it into the base for a regional hand trauma service.

**JKS** 

- 6.5 Mr Egan advised the Committee that whilst he fully supported the upgrade of the labour ward, he was concerned that the specialist skills built up in the Burns Unit were retained, particularly as patients with significant burns were taken to the intensive treatment unit rather than the Burns Unit. He queried the "optimism bias" and asked about the reclamation of VAT.
- 6.6 Mrs Goldsmith advised that the "optimism bias" was undertaken in line with a specific formula agreed by the Scottish Government and indicated that the correct amount of VAT would be reclaimed.
- 6.7 Mr Gabbitas advised the Committee that ward 19 could be designed in such a way as to address any clinical concerns.
- 6.8 Mr Johnston advised the Committee that he fully supported the proposal which had also been supported by the St John's Hospital Stakeholder Group. He was anxious that the use of the existing theatre and ward 20 when the labour ward was finished should be maximised and noted that the proposals open up a range of options.
- 6.9 Mrs Sansbury advised that the process would be separated and details of the options considered when the Business Case was produced.
- 6.10 Mr Egan commented that the Burns Unit would require specialised air flow systems, which would be expensive. Dr Farquharson advised the Committee that this was a busy labour ward and the proposals would be better for patients and Professor Iredale commented that the proposal was eminently sensible.
- 6.11 The Chair advised that the Committee was very supportive of the proposals, although he felt it was unfortunate it had taken 2 years to get to this stage. He sought re-assurance that everything would be done to expedite the project.
- 6.12 Mrs Sansbury undertook to come back to the June meeting of the Finance & Performance Review Committee with costings and details of the options for the Burns Unit, as well as a revised timetable.

  JKS
- 6.13 The Committee agreed to note the proposed plans for decanting the labour ward so that upgrade of the unit could be completed in a single phase; to approve the development of a Business Case for the associated upgrade of ward 19 in order to move ward 20 into the facility before the labour suite was decanted into ward 20; to note the revised timelines for this two-stage project which would see the earliest completion date being c. 2013; to note that the Lothian capital investment group had approved the release of funds to carry out a feasibility study into the transfer to ward 20 and the required upgrade of ward 19 with the aim of confirming the plans and providing more accurate costs for that element allowing the overall costs to be identified and agreed that the upgrade should be expedited as much as possible.

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# 7. Financial Position to 20 February 2012

- 7.1 Mrs Goldsmith introduced a previously circulated report providing the Committee with an overview of the financial position of NHS Lothian to the end of February 2012.
- 7.2 The Committee noted that NHS Lothian was reporting an underspend of £0.1m for the 11 months to the end of February 2012 and a further favourable movement in the month of £0.23m. This reflected under-delivery of £1.569m against the local re-investment plan target off-set by a £1.671m underspend on other budgets.
- 7.3 Mrs Goldsmith advised that the Finance department was working on the yearend position and the underspend would be carried forward into the next financial year.
- 7.4 The Committee agreed to note the continued forecast of break-even for the financial year 2011/12 and the continuing actions to deliver an increased level of current savings from the 2011/12 targets and minimising the carry forward into 2012/13 financial plan.

## 8. Performance Management

- 8.1 Dr Farquharson introduced a previously circulated report giving an update on the most recently available NHS Lothian performance data as reported through local and national systems.
- 8.2 Dr Farquharson commented that a number of areas, such as suicide reduction used annual figures so no change was reflected in the report. Work had been undertaken to tackle delayed discharges and to address a failure to meet targets on stroke.
- 8.3 Mr Egan expressed his concern at the level of delayed discharges and asked if more detailed information could be included.
- 8.4 Dr Farquharson explained that the paper concentrated on patient flow but further details of long-term delayed discharges could be included in the next report.

DF

- 8.5 Professor Iredale referred to data on obesity which showed that the largest number of obese females in the world were found in Lothian. Means of dealing with this situation were being examined.
- 8.6 Mr Gabbitas commented that there were some difficulties in the data relating to delayed discharges, particularly where the numbers on the database had not been validated. Whilst the numbers were challenging with 63 delayed against a target of 48, these levels were not particularly bad compared to earlier days. The City of Edinburgh Council had provided 3,000 extra hours per week at a cost of £3.6m to the change fund initiative and this would be in place shortly. Unfortunately, demand for such accommodation was continuing to increase.

- 8.7 Mr Egan commented that it was the City of Edinburgh Council's responsibility to provide these services and advised that West Lothian had reduced the delayed discharges to zero by building increased capacity. He commented that in England as soon as local authorities who failed to provide the necessary facilities were fined, the problem was resolved.
- 8.8 The Committee agreed to receive the update and note the actions being taken where performance was currently off trajectory. It was noted that responsible Directors identified within the paper had provided and agreed the information and the actions taken to address any shortfall against the agreed trajectories. It was noted that a separate report would be available regarding the position on waiting times and that, as previously reported, the Health Intelligence Unit was continuing to develop dashboards for Committee, and it was anticipated that this data would form part of a reporting suite. The Committee also noted that more data and a better understanding of delayed discharges was necessary.

DF

# 9. Waiting Times Access Targets

- 9.1 Mrs Sansbury introduced a previously circulated report giving an update on the current position in relation to waiting times within NHS Lothian.
- 9.2 The Committee noted that as a combination of two factors namely the requirement to offer treatment to all those previously suspended because of unavailability to take up the offer of treatment in England and changing practice of suspension the direct result had been an immediate deterioration in the reported performance from October.
- 9.3 Mrs Sansbury indicated that there was likely to be a residual balance of backlog to be cleared beyond the end of June, largely in relation to the complex tail of patients waiting for specialist treatment. In addition, further inpatient/ day case treatment capacity would be required to deal with an estimated 800 patients converting from outpatient referrals from July onwards.
- 9.4 The Committee noted that work was being undertaken in partnership with the Scottish Government Health and Social Care Directorates' colleagues to develop sustainable local capacity plans, including evaluation of imbalance, and would form the basis for assessing any resource requirements for the second quarter and beyond.
- 9.5 Mrs Sansbury commented that the staff carrying out the recovery plan were those who were under investigation and were, therefore, under a huge amount of stress.
- 9.6 Professor Iredale commented that the change in the shape of the performance curve showing the number of cases outstanding was gratifying and he emphasised the need to ensure that the same problem did not recur through a comprehensive redesign of the service. Dr Bryce commented that service redesign would help but she appreciated that there was significant pressure on staff.

- 9.7 The Chair questioned whether any of the staff on redeployment would be able to assist with this work and Mr Egan advised that none of the staff on redeployment was suitably qualified.
- 9.8 Mrs Sansbury advised that the Director of Human Resources and Organisational Development had been helpful and some support had been arranged and the national team was also assisting. More detailed work had to be undertaken, as well as work on job planning.
- 9.9 The Chair commended the work currently being undertaken to resolve the situation.
- 9.10 Mr Boyter advised that the critical incident review had been kept to schedule and the final report would be produced on 20 April, at which point an appropriate way of dealing with the position would be agreed. He indicated that the Scottish Government had been fully briefed on the position.
- 9.11 Mrs Sansbury advised that two of the services, vascular surgery outpatients and general surgery outpatients were both already back in balance and work was ongoing to bring the other areas into balance.
- 9.12 The Committee agreed to note the position, as well as the actions and resource implications associated with the recovery of the position in quarter 1 and recognised that there was likely to be a requirement for further action beyond the end of June to support the ongoing delivery of targets.

#### 10. Workforce Efficiencies within NHS Lothian

- 10.1 Mr Boyter introduced a previously circulated report outlining progress to date in regard to planning workforce reductions and efficiencies.
- 10.2 Mr Boyter advised that there had been a reduction of 556.8 whole time equivalent staff in posts since 1 April 2011 to 29 February 2012 against the annual target of 734 whole time equivalents securing 75.9% of the annual target. This was 116.2 whole time equivalents behind the projected target of 673 whole time equivalents (as at the end of February) as a consequence of the activity pressures caused by the extra beds opened and the resolution of the waiting times in the University Hospitals Division. However, in regard to the 2-year target of a reduction of 2,000 posts (1,468 whole time equivalents) 95% of this target had been secured with a cumulative reduction of 1,390 whole time equivalents at the end of February being 78 whole time equivalents (5%) from target with March still to be reported and so, over the 2-year period, NHS Lothian remained on target.
- 10.3 The Committee also noted that the sickness absence average position from 1 April 2011 to 29 February 2012 was 3.95% against 4.4% for the same period in the previous year equating to an annual saving of 83.2 whole time equivalents (£3.23m).

- 10.4 Mr Boyter commented that although NHS Lothian's performance in this area was better than all other NHS Boards in Scotland, there was still room for improvement.
- 10.5 Dr Bryce expressed an interest in the demographics of workforce reductions as problems could arise with particular staff groups if there were sizeable numbers of people likely to retire over a short period of time. Mr Boyter undertook to share the demographic statistics with Dr Bryce.

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#### 11. NHS Lothian Mid-Year Review 2011/12

- 11.1 Mrs Goldsmith introduced a previously circulated report presenting correspondence from John Connaghan, Director of Workforce and Performance at the Scottish Government Health and Social Care Directorates, recording the main points of discussion from his meeting at Waverley Gate on 27 January 2012 looking at performance progress in 2011/12 and at NHS Lothian preparation for 2012/13.
- 11.2 Mrs Goldsmith advised the Committee that the external review report by PricewaterhouseCoopers into aspects of NHS Lothian's waiting times management and practices had been commissioned by NHS Lothian and not the Scottish Government.
- 11.3 The Committee agreed to note the correspondence.

## 12. Disbandment of the Primary and Community Partnership Committee

- 12.1 Dr Farquharson introduced a previously circulated report providing the Committee with an opportunity to consider and agree its role with respect of dependent contractors following the removal of the Primary and Community Partnership Committee from the Board's governance architecture. It was noted that the Operational Audit Sub-Committee had referred this matter to the Committee.
- 12.2 Dr Farquharson advised that there were very few dispute resolutions with independent contractors and these usually averaged one or two a year. The Committee agreed to recommend to Lothian NHS Board that its terms of reference be amended with the inclusion of an additional paragraph in the Committee's remit

"On the Board's behalf to have overall responsibility for the governance of the discharge of disciplinary responsibilities regarding the independent contractors/family health service practitioners."

DF

SG

# 13. Prison Healthcare Transfer – Traditional Finance and Accounting Arrangements

- 13.1 The Committee noted a previously circulated report clarifying the arrangements for service financing and the accounting for the impact of the healthcare service transfer, in respect of prison facilities within the geographic boundaries of NHS Lothian.
- 13.2 Mr Egan expressed some concerns about the governance arrangements and it was agreed to defer consideration of this report to the next meeting.

# 14. Date of Next Meeting

14.1 It was noted that the next meeting of the Committee would be held on Wednesday, 6 June 2012 from 9.00 a.m. to 11.30 a.m. in Meeting Room 7, Waverley Gate, Edinburgh.





# RHSC + DCN - Approach to Reference Design

RHSC + DCN at Little France

May 2012

**NHS** Lothian

Rillbank Terrace, Edinburgh

# Issue and revision record

<b>Revision</b> A	<b>Date</b> 9 Jan 12	<b>Originator</b> AGScott	<b>Checker</b> PC Hampson	<b>Approver</b> RD Cantlay	<b>Description</b> Draft Issue
В	25 Feb 12	AGScott	D Kelly (DL) D Stillie PC Hampson AA Duncan	RD Cantlay	Pre-issue Draft – Issued to NHSL (B Currie & N McLennan); MacRoberts (A Orr) and Ernst & Young (M Pryor)
С	20 Mar 12	AG Scott	AA Duncan	RD Cantlay	Formal Issue for Client review and approval
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Е	30 Mar 12	AG Scott	SA Knight	RD Cantlay	Formal issue
F	4 Apr 12	AG Scott	SA Knight	RD Cantlay	Issue following final review by NHSL

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<b>Revision</b> G	<b>Date</b> 9 May 12	<b>Originator</b> AG Scott	<b>Checker</b> D Stillie	<b>Approver</b> RD Cantlay	<b>Description</b> Issue following review with SFT
Н	30 May 12	AG Scott	K Falconer	RD Cantlay	Issue to incorporate change in wording at Sect 4.1 para 5
J	28 Aug 12	K Falconer	F McQuarrie	R Cantlay	Issue following comments from SFT and removal of references to RDS.

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# **Executive Summary**

This report builds upon the discussions at the Project Board in July 2011 regarding procurement options for the RHSC + DCN NPD Project where it was agreed that a Reference Design would be developed to mandate elements as they relate to clinical functionality which NHSL would be required to sign off in any event under the Project Agreement.

The Reference Design for RHSC + DCN has been developed to streamline the procurement process and give greater certainty over the final design of the facility.

The key benefits are seen as being:

- Enhanced cost certainty at OBC
- Clinical Design largely complete very limited future engagement of scarce clinical resource
- Shortens Competitive Dialogue Phase
- Utilises available programme time parallel with Consort Negotiations ie no overall delay to strategic programme
- Minimises abortive design cost for unsuccessful bidders

The Reference Design comprises Mandatory and Non-mandatory elements. The Mandatory elements define the Operational Functionality which NHSL will sign off in the final Project Agreement. The Non-mandatory elements comprise information produced in order to verify the feasibility of the Reference Design along with information that Bidders will require in order to complete their proposals. The Planning Permission in Principle application has also been developed in the course of the preparation of the Reference Design.

The Schedule of Accommodation based on the final Reference Design will be issued to Bidders with NHSL's original Schedule of Accommodation being made available to Bidders for information. Floor plans (at both 1:500 and 1:200 scale) have been developed for the overall facility. In addition room layouts (at 1:50 scale) have been developed for Key and Generic Rooms (covering 52% of the rooms). This substantially reduces the risk carried by NHSL in regard to areas specified being adequate to accommodate equipment required albeit there is a residual risk for the rooms that remain to be drawn at 1:50 scale.

It is recognised that Bidders are likely to suggest revisiting the Reference Design during the Competitive Dialogue in order to differentiate themselves from other Bidders. NHSL will resist any such suggestions on the basis that the Reference Design represents the operational and clinical solution agreed by NHSL and

Stakeholders. The absence of an external Healthcare Planner on NHSL's advisory team during procurement could be perceived as a risk. Given however the previous healthcare planning input to the project and NHSL's internal resource, this is deemed by NHSL to be a minor and manageable risk.

The release of the Reference Design Team to join bidding teams requires both NHSL and Technical Advisory Team to ensure that the Reference Design is fully compliant and fully understood in preparation for procurement commencing.

The following are key action points arising out of this report:

- NHSL to review and confirm the contents of this paper to allow the development of the ITPD and associated documents moving forward.
- The definition of Operational Functionality rather than Clinical/Non-clinical Functionality to be developed in the Project Agreement.
- NHSL and Technical Advisor Team to be fully briefed on the Reference Design prior to departure of Reference Design Team.
- NHSL to confirm that the Reference Design complies with their requirements and output specification;
- All members of NHSL's dialogue team (NHSL and Advisors) to be briefed on the contents of this paper; and
- Bidders to be fully briefed on non-negotiable status of Reference Design.

# 1. Introduction

#### 1.1 Purpose of Report

The purpose of this report is to:

- Outline the reasons for preparing and the purpose of a Reference Design
- Outline the level of detail required in a Reference Design
- Outline the distinctions between mandatory and non mandatory elements of the Reference Design
- Application of Reference Design during Competitive Dialogue
- Outline the development of the Reference Design

The report builds upon the procurement options and recommendations endorsed by the Project Board in July 2011. The key option adopted was outlined as follows:

#### MANDATE CLINICAL FUNCTIONALITY

This involves developing the design to the extent required in order to fix aspects of the design as they relate to clinical functionality, as defined under the Project Agreement e.g.

- Access
- Relationships between buildings
- Adjacencies between clinical departments and between rooms
- Schedule of accommodation areas
- Room layouts (loaded)

The clinical functionality elements will then be mandated within the invitation to participate in dialogue (ITPD).

#### 1.2 Definition of Functionality

To date, reference has been made to Reference Design in relation to Clinical Functionality. The following note extracted from the Design Development Protocol indicates how this could lead to some confusion:

Clinical functionality refers to, and only to, the project's capacity for use by the Board or its staff for carrying out the trust's clinical functions and non-clinical functions. The Board's non-clinical functions are deemed to include all hard and soft Facilities Management services retained by the Board that are out-with the bidder's responsibility.

Since 'Clinical Functionality' refers to both clinical functions and non-clinical functions, we should refer to Operational Functionality as opposed to Clinical Functionality since some of the mandatory areas of the Reference Design will cover non-clinical functions. This is in line with the SFT Standard Form Project Agreement (NPD Model) where the reference is to Operational Functionality (See Appendix A) - largely because the standard form will also be adopted in non-healthcare projects. (Note that Operational Functionality is not defined in the Standard Form as noted in the extract in the SGHD Standard Form also indicated at Appendix A. This will need to be considered by the Procurement Workstream when developing the draft PA for inclusion in the ITPD.)

# 2. Reasons for Preparing a Reference Design

## 2.1 Background to introduction of Reference Designs

The use of a Reference Design in Non Profit Distributing (NPD) projects is being promoted by the Scottish Futures Trust (SFT) and the Scottish Government (SG).

Previously on Public Private Partnership (PPP) projects in Scotland, a Conventionally Procured Assessment Model (CPAM) design was sometimes prepared but this was at a strategic level and prepared principally for the purposes of feasibility and to form the basis of the Outline Business Case (OBC) capital costs.

The benefits offered by the use of Reference Designs in NPD projects in the health sector are as follows:

- To give greater certainty in OBC costings;
- Since Operational Functionality design risk sits with the Procuring Authority anyway, this can be developed by the Procuring Authority to inform the procurement process;
- To give greater certainty over final design to reduce the risk of the Board ending up with a design it does not wholly favour;
- To avoid detailed input being required from Clinicians during the Competitive Dialogue process where the Clinicians would have to consider in detail, three solutions with three separate Bidders;
- Very limited engagement of a scarce clinical resource being required during the Competitive Dialogue process
- Capitalises use of available programme time. At RHSC + DCN, design development running parallel with Consort Negotiations ie no overall delay to strategic programme;
- Minimises abortive design cost for unsuccessful bidders; and,
- To streamline the NPD procurement process thus reducing the cost and programme to both the Procuring Authority and Bidders.

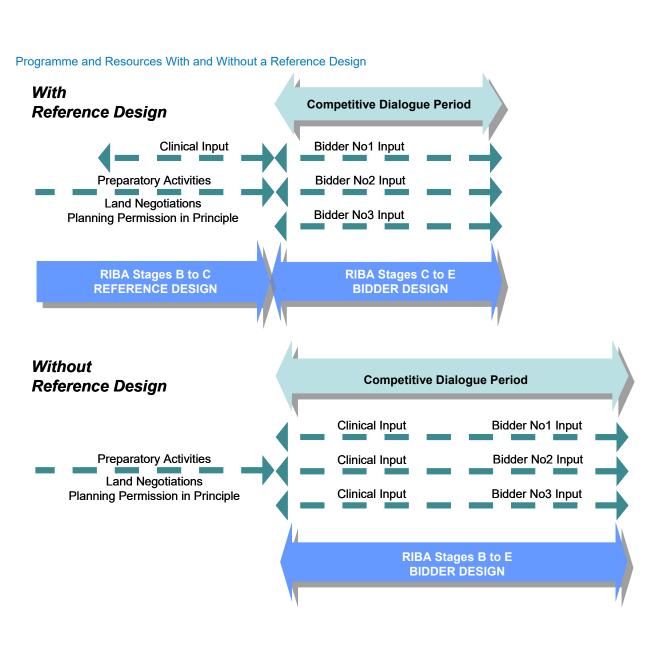
## 2.2 Reference Design and Other Project Information

As noted above, the principal purpose of the Reference Design is to define Operational Functionality. However during the preparation of the Reference Design, other information will be prepared both as a by-product of undertaking the reference design and as a general project requirement. This will include the Planning Permission in Principle (PPiP) application, servicing information and boundary definitions. Whilst this information will be made available to the Bidders, its function

and purpose is quite separate from those areas of the Reference Design that define Operational Functionality. This distinction is outlined in the list of Reference Design Deliverables at Appendix B.

## 2.3 Resource Input and Programme

The following shows the programme and resourcing advantages of procurement using a Reference Design. With a Reference Design RIBA Stages B to C are carried out in advance of procurement. The remainder of the RIBA Stages, C to E are completed by Bidders. With no Reference Design, Bidders have to complete the full design, Stages B to E, during a longer competitive dialogue period and with a threefold increase in Clinical input.



Source: RHSC + DCN Procurement Model

## 3. Level of Development of Reference Design

## 3.1 Basis for Level of Development Required

The level of development of the Reference
Design is predicated upon the definition of
Operational Functionality defined in the
Project Agreement. This is based on the
Standard Form definition outlined in Appendix
A. The constituents of the Reference Design
are detailed in the matrix of Reference Design
Deliverables at Appendix B. The level of
development can be described as
approximating the RIBA Plan of Work, Stage C – Concept Design (See
Appendix C).

On the RHSC + DCN project greater input is required in the preparation of the Reference Design than would normally be the case. This is because of the particular and unique issues surrounding the development of this facility on this site. These issues include:

- The connections required to the existing RIE building predetermined by the location of the existing A&E department;
- The restricted nature of the site bounded on all sides as it is by existing road and services infrastructure;
- Height restrictions imposed by the local planning authority
- Flood protection measures required;
- The site being part of an existing PFI / PPP site; and
- Interfaces required with the existing RIE PFI service provider

The requirement however to prepare and detail services interfaces, detailed site information, 1:50 layout drawings and attendant equipment requirements goes beyond the normal Stage C level of development thus the Reference Design should be described as being at RIBA Stage C+.

These issues have combined to make the development of the RHSC + DCN Reference Design considerably more complicated and resource intensive exercise than would normally be required in other NPD projects of this scale.

The Reference Design can be described as a graphic representation of NHSL's accepted design solution to the requirements of:

- The Clinical Output Specification;
- The Board's Construction Requirements;
- The Soft FM Specification;
- The Schedule of Accommodation; and

### The Adjacency Matrix.

To achieve this the 1:500 scale departmental adjacency layouts, the 1:200 scale department layouts and 1:50 scale generic and key room layouts were developed in conjunction with and signed-off by NHSL.

## 3.2 Other Project Information

Whilst the principal purpose of the Reference Design is to define Operational Functionality, during the preparation of the design other areas of the design proposal need to be developed in order to test the viability of the solution being proposed. These deliverables are included in the matrix of Reference Design deliverables at Appendix B. An example is the PPiP application, where the footprint, massing, roads and footpaths have to be developed in consultation with NHSL and Local Planning Authority. A further example is the servicing solution. The Reference Design team has taken cognisance of servicing requirements to demonstrate that the design being developed is feasible. However any such servicing solutions developed will be indicative only since they form no part of the Operational Functionality as defined in the Standard Form. It will be for the Bidders to develop these areas since the risk is outwith that of Operational Functionality and must rest with the Bidders and, ultimately, Project Co.

## 4. Mandatory and Non Mandatory Elements of Reference Design

## 4.1 Reference Design Mandatory Elements

The Operational Functionality requirements for the RHSC + DCN will be outlined in the Clinical Output Specification, Schedule of Accommodation and the Adjacency Matrix.

The ITPD will state that it is mandatory that Bidders develop proposals that comply with the Operational Functionality solution as detailed in the Reference Design.

The Operational Functionality will be defined in the following constituents of the Reference Design:

- 1:500 Interdepartmental Layouts;
- 1:200 Layouts; and
- 1:50 Generic and Key Room layouts

There is absolutely no latitude for alternative solutions to the Operational Functionality on the RHSC + DNC facility. This is because of the number of fixed points that the design must address, for instance linkages to the existing RIE and the constrained nature of the site. With the Operational Functionality thus fixed within the Reference Design proposals, it follows that there is no latitude for alternative solutions to this aspect of the departmental room layouts. As a consequence of this it also follows that circulation routes will be dictated if the operational functionality is to be retained as agreed, however these in themselves are not considered to be mandatory. Instead, minimum corridor widths are mandatory and will be indicated in the Reference Design and in the D&C Output Specification as is the norm. Since communications spaces including lifts and stairs, general communications routes and servicing solutions are independent of the Operational Functionality requirement these also are not mandatory in the Reference Design but indicated for information only. However such spaces will be required to comply with the requirements in the D&C Output Specification, in particular the requirement for Hospital Street communications spaces to be a minimum of 3.0 m in clear width.

Whilst there is an absolute requirement to maintain Operational Functionality, Bidders will have latitude and will be encouraged to develop innovative solutions for the external and internal architectural expression and site layout for the Facility. The Reference Design as currently developed contains certain features incorporated primarily for the purpose of developing an architectural solution suitable for inclusion

in the Planning Permission in Principle application. In the ITPD, Bidders will be advised that features such as curved walls and the external landscaping forming part of the Reference Design are indicative only given that these have no influence on the Operational Functionality. Bidders will therefore be encouraged to apply a unique design strategy founded on sound architectural principles whilst complying with the mandatory elements of the Reference Design.

Regarding the Schedule of Accommodation, the Reference Design will result in areas that differ from the precise Board requirements simply as a function of the design process. It will be these areas that Bidders will have to adopt since these will have been agreed with NHSL. The Schedule of Accommodation developed by NHSL should however be issued for information to Bidders (in the Data Room) to indicate the minimum acceptable areas should any minor adjustments be required during the design development process. This will only apply to those elements detailing the Operational Functionality. Areas such as service spaces (including risers) and Hard FM spaces will be for the Bidders to determine since responsibility and risk for these as non operational spaces will ultimately rest with Project Co.

Whilst the Schedule of Accommodation will indicate areas, 1.50 room layouts will determine and fix the proportions of spaces, width to length, so that these proportions will also be defined for the purposes of Operational Functionality.

The 1.50 layout drawings included in the Reference Design will cover the Generic and Key Rooms only. Generic Rooms are those rooms that are replicated more than four times across the facility. Key Rooms are those that have critical operational requirements which NHSL has identified for more detailed consideration and development at this stage. These include major spaces in the Emergency Department, operating theatre, radiology and outpatients departments. In RHSC + DCN there are approximately:

- 1812 rooms in total;
- 207 are covered under 75 key room types and;
- 730 are covered by 26 generic room types;

The Reference Design is therefore developed in full at 1.500 and 1.200 scale. At 1.50 scale, where individual room layouts are detailed, the

coverage is 52% of the total number of rooms (equating to 41% of the net floor area). This accounts for 937 rooms leaving a total 875 for which 1,50 layout drawings will not be included in the Reference Design.

The requirements for these remaining rooms will be detailed in a combination of,:-

- The General Requirements (subsection C of the Board's Construction Requirements);
- The Clinical Output Specifications (subsection D of the BCRs);
- The Adjacency Matrix (appendix A to the BCRs);
- The Environmental Matrix (appendix B to the BCRs);
- The Schedule of Operational/Design Notes (appendix C to the BCRs);
- The Equipment Schedule (Schedule Part 11 of the Project Agreement);
- The Schedule of Accommodation; and
- The Operational Functionality elements of the Reference Design..

The level of development of Room Layouts in the RHSC + DCN Reference Design greatly reduces the risks of room sizes and equipment requirements being incompatible ie rooms not being large enough to accommodate the equipment required. Hitherto, projects have been procured where this exercise is undertaken by the Bidders/Preferred Bidder with the risk of any changes being required to maintain and achieve operational functionality having to be borne by the Procuring Authority. With the level of design development in RHSC + DCN this risk is now reduced to the remaining 48% of rooms (875) none of which are key rooms or generic rooms. It should be noted however that the development risk of these Operational spaces does remain albeit this risk is likely to be minor given the low cost or cost

neutral solutions that are likely to be found. Further, during the Competitive Dialogue period, Bidders will be requested to review these residual rooms and associated equipment requirements and to highlight any issues they may have so that appropriate solutions can be found and agreed with the Board during bidding process. This will further mitigate, if not eliminate any risk to be borne by the Board following the appointment of the Preferred Bidder.

## 4.2 Non-mandatory Elements of the Reference Design

Outwith those mandated elements of the Reference Design, Bidders will have freedom to develop proposals constrained only by the requirements of the Board's Construction Requirements. Bidders will be positively encouraged to develop innovative solutions in those areas not prescribed by the Reference Design. Notwithstanding this, the information forming the Reference Design also includes elements that Bidders must address during the bidding process as follows.

As noted above, only certain elements of the information included in the Reference Design will be mandatory; those that define the Operational Functionality. The Bidders will however also be required to take cognisance of the other parts of information issued either as part of the ITPD or included in the Data Room insofar as this will detail fixed points such as site boundaries and services interconnections. Whilst compliance with this information will be required, it must be considered outwith the definition of Operational Functionality and the risks associated with the validity of this information will ultimately be borne by Project Co.

The table at Appendix B gives a detailed analysis of the Reference Design deliverables distinguishing those that are mandatory and those that are non-mandatory. The Non-mandatory elements of the Reference Design may be considered under the following:

- Information that would be prepared and made available to Bidders even in the absence of a Reference Design; and
- Information that has been prepared as a consequence of preparing the Reference Design.

The information that would be prepared irrespective of the preparation of the Reference Design includes such matters as:

- Site boundary drawings;
- Services interconnections;
- Brief for a Standalone Energy Centre and FM Goods Handling + Distribution
- PPiP application drawings; and
- Wayfinding strategy.

This information is made available to supplement the mandatory requirements outlined in the Board's Construction Requirements and the Bidders will be required to comply with these requirements and accept responsibility for verifying their validity.

The following elements will be developed as a consequence of the Reference Design being prepared. This is deemed to be non-mandatory and will include such matters as:

- Structural engineering solutions;
- Building Services engineering solutions;
- Servicing strategies and space allocations; and
- Hard FM solutions and space allocations.

Information issued in this regard will be issued to the Bidders for information only so that they can understand the intent of the Reference Design. The Bidders will however have to refer to the Board's Construction Requirements for the detailed requirements for matters such as the structural engineering, servicing and Hard FM requirements for which they will ultimately carry the risk. Bidders will need to be advised the Board's Construction Requirements will always take precedence over the Reference Design for matters not defining Operational Functionality.

Departmental Circulation and Communication space indicated in the Reference Design will also be non-mandatory but any minimum widths specified will be treated as mandatory. Any courtyards and terrace spaces are treated as communications spaces. However whilst these spaces will need to be indicated on the Schedule of Accommodation they need to be excluded from the measurement of the Gross Internal Floor Area ie indicated below the line.

## 4.3 Room Information

The specific room requirements (the "**Room Information**") will be detailed in a combination of:-

- The General Requirements (subsection C of the Board's Construction Requirements);
- The Clinical Output Specifications (subsection D of the BCRs);

- The Adjacency Matrix (appendix A to the BCRs);
- The Environmental Matrix (appendix B to the BCRs);
- The Schedule of Operational/Design Notes (appendix C to the BCRs);
- The Equipment Schedule (Schedule Part 11 of the Project Agreement);
- The Schedule of Accommodation; and
- The Operational Functionality elements of the Reference Design.

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

The Equipment Lists will also have an element of generic information particularly regarding the Group 1 equipment where minimum requirements will be outlined. NHSL will outline the generic requirements for items such as sinks, taps, and wash hand basins with the Bidders advising on the specific manufacturer and components selected during the Preferred Bidder and post Financial Close stages. The remainder of the equipment will be for NHSL to specify and this will be mandated to the Bidders.

Previously in PFI and PPP projects, draft or indicative Room Data Sheets could be issued with an Invitation to Negotiate (ITN) with the responsibility for completion resting with the Preferred Bidder to be carried out in conjunction with NHS Board. In NPD projects with a Reference Design there is a requirement for a more complete set of Room Information to be available to Bidders.

## 5. Reference Design during Procurement

## 5.1 Reference Design prior to Competitive Dialogue

Prior to the commencement of the Competitive Dialogue, Bidders should be clearly briefed that the Reference Design solution to Operational Functionality is mandatory as follows:

#### IM+PQQ

This will set out the approach to Reference Design at a high level.

## **Bidders Day**

The approach to Reference Design will be presented in detail by NHSL and made available to Bidders along with supporting information.

#### **ITPD**

Instructions to Bidders in regard to the application of the Reference Design during the procurement period will be outlined in the ITPD. A draft of the instruction that will be given is outlined in Appendix D (to follow). This stresses the non – negotiable nature of the operational functionality elements of the Reference Design.

Where circumstances may have changed since the completion of the Reference Design these will have to be highlighted to the Bidders. It will be essential that the same clear guidance is given to all Bidders at the outset regarding what the changes are and what amendments should be made to the ITPD or information in the data room.

The evaluation criteria will also be outlined in the ITPD. Generally where a requirement of the Reference Design is deemed to mandatory, Bidders will be evaluated on a pass / fail basis. The quality criteria marked as part of the evaluation will be concentrated on the non-mandatory elements of submissions.

## **5.2** Variant Bids

No variant bids are to be permitted during the procurement process. This will reinforce to Bidders the mandatory status of the Reference Design.

## 5.3 Reference Design during Competitive Dialogue

Bidders will be instructed to comply with all mandated requirements associated with the Reference Design. During Competitive Dialogue NHSL will stress to Bidders that the mandatory elements of the Reference Design are not a matter for debate and is the design solution that NHSL wish to see developed.

It is recognised that Bidders may seek to question NHSL's solution to Operational Functionality developed and outlined in the Reference Design in order to try and gain a competitive advantage. Bidders may employ Healthcare Planners to review and question the schedule of accommodation and design solution with a view to proposing alternative solutions. However, whilst the Reference Design represents a particular solution and, as with any design solution could be revisited for further development given the objective nature of design, this is not an option that will be considered where this impacts on the mandated elements. Any review of the Reference Design would lead to additional affordability and programme risks and the benefits of the reduced Clinical input required through the development of a Reference Design would be lost since further extensive engagement would be required with Stakeholders.

With regard to any further Healthcare Planning input being suggested by Bidders, the Board can demonstrate that a robust approach has been taken in the development of the Reference Design. NHSL has led the Healthcare Planning input on the RHSC + DCN throughout the development of the scheme. This was supported heavily by Capita in the capital funded scheme. During the course of the development of NPD project, Capita have been retained to provide reviews of critical areas and assist with the development of the Clinical Output Specifications. A health care planning review has also been undertaken by SFT. Given this level of input to date, NHSL has confirmed that no external Healthcare Planning input is required during the Competitive Dialogue process and instead the Board will rely on the in-house expertise that has led this input throughout.

The importance of adherence to the mandatory elements of the Reference Design will therefore be stressed throughout the Competitive Dialogue period

## 5.4 Reference Design Post Competitive Dialogue

Following the close of Competitive Dialogue, and the appointment of the Preferred Bidder, the Reference Design will be replaced with the Preferred Bidder's full design solution that is affordable and commercially acceptable. In summary, the Reference Design will have fulfilled the function required and will become extinct.

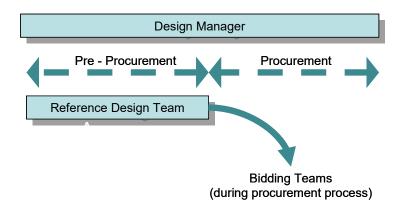
## 6. Development of Reference Design

### 6.1 Reference Design Team Appointment

The Reference Design is developed by a Reference Design Team. In the RHSC + DCN project, the incumbent design team from the capital funded project was commissioned on the basis of the knowledge held regarding the project. In this instance the Reference Design Team were ring fenced for the Reference Design development function only so that they could be released to join bidding teams during the procurement stage. This is indicated in the diagram below.

This approach meant that there was complete separation between the Technical Advisor team (involved in the development of procurement and contract documents) and the Reference Design Team (engaged at arms length to develop the Reference Design). A Design Manager was also appointed to provide the linkage so that the Reference Design Team prepared a solution that was consistent with that required by the Technical Advisory team without giving the Reference Design Team any understanding or involvement in the development of the procurement and contractual elements of the project. This was vital in order that there was a level playing field after the Reference Design Team joined various bidding organisations.

Reference Design Team Roles



Source: RHSC + DCN NPD Model

### 6.2 Brief for Reference Design

The Brief for the Reference Design came from the Clinical Briefs developed by NHSL (being adapted for inclusion in the ITPD as Clinical Output Specifications), the Schedule of Accommodation and the Adjacency Matrix. (For RHSC + DCN, the Reference Design also relied on briefing information developed for the capital procured scheme.) The brief also includes the Soft FM construction requirements for those elements of FM to be retained by Board.

As previously noted, the Reference Design Team is also responsible for the PPiP application; it will also develop the site information required by Bidders such as utilities locations and site layouts.

Whilst the foregoing outlines the minimum requirements for a Reference Design, the brief for a Reference Design Team needs to be prepared on a project by project basis i.e. it may include assisting in site selection, the development of enabling works; negotiations with third parties such as utility providers; procurement and interpretation of site investigations; legal issues such as boundary definitions. The core will however be to develop the Reference Design mandatory elements indicating the Operational Functionality.

### **6.3 Reference Design Commentary**

In addition to the drawings and documentation that will constitute the Reference Design, a commentary will be required in the ITPD to outline:

- The basis of the Reference Design solution;
- Areas for further consideration i.e. those areas where the Reference Design Team may not have fully resolved particular issues or compromises have had to be made;
- The Mandatory and Non-mandatory elements (as outlined in the Appendix B);
- The application of the Reference Design during the procurement process.

## 6.4 Reference Design Sign-off and Handover

A feature of the RHSC + DCN as noted above is that the Reference Design team will not be retained by NHSL during the procurement

period. The Reference Design will therefore have to be handed over to the Technical Advisory team and actions will have to be taken to cover for the fact that the Reference Design team will not be available to address queries during the procurement process.

In terms of the handover and sign-off of the Reference Design, the following matters will have to be addressed:

- Is the Reference Design fully aligned with the requirements of the Clinical Output specifications;
- Has NHSL taken ownership of the Reference Design on the basis that some areas of the design will be a compromise between the requirements and what can be achieved through design;
- Is the Reference Design fully aligned with the Board's Construction Requirements – architectural, engineering and Soft FM requirements;

The Technical Advisory team during procurement must be in a position to fully understand the development of the Reference Design from a technical point of view. The Team will need to take ownership of the design as if it was its own work.

In order that a robust handover and sign-off of the Reference Design is achieved, the following actions are required to address and mitigate the issues listed above:

- NHSL has signed off on the 1:500 layouts. NHSL will be required to do the same for the 1:200 layouts and the 1:50 Key and Generic Room layouts. This will need to be in place before the Reference Design Team is released.
- NHSL is currently in the process of finalising the Clinical Output Specifications. This is being carried out by the team involved in NHSL's input to the Reference Design. Whilst this should ensure that the Clinical Output Specifications and the Reference Design are fully aligned, a final review should be carried out by NHSL working in conjunction with the Reference Design to ensure this is the case.
- NHSL needs to highlight now any concerns regarding the Reference Design. Whilst NHSL will ultimately sign-off the Reference Design through the 1:500s, 1:200s and the 1:50s, NHSL should advise the Technical Advisory team of any areas where it believes further development may be required so that this can be conveyed to the Bidders.
- The alignment of the Reference Design with NHSL's Construction Requirements has largely been achieved with the involvement of the

Reference Design Project Manager in the development of the ACRs which includes the Soft FM Construction Specifications. Not withstanding this, there is a considerable task to be undertaken to ensure that all of the Technical Advisory Team have a full understanding of the Reference Design. This will need to be achieved through the two teams (particularly in regard to Engineering) working together over a period until complete knowledge transfer is achieved.

This will entail the two teams meeting regularly and the Technical Advisory Team undertaking a thorough and detailed review of the Reference Design.

The Technical Advisory team must be in a position to adopt full ownership of the Reference Design prior to the departure of the Reference Design Team. Any areas of concern should immediately be highlighted and a satisfactory resolution obtained prior to procurement commencing.

## 7. Conclusions

## 7.1 Operational Functionality

The term Operational Functionality should be used in preference to Clinical and Non-Clinical Functionality given that both Clinical and Non-clinical Functionality are being mandated in the Reference Design.

## 7.2 Purpose of Reference Design

The purpose of developing a Reference Design is to assist the procurement process to:

- Assist with OBC and pre-procurement costing;
- Provide greater certainty over the final design solution;
- To optimise the input required from Stakeholders;
- Capitalise programme time allowing other activities to take place in parallel to the design development process;
- Reduce bidding costs; and
- To streamline the procurement process.

## 7.3 Mandatory and Non-mandatory Elements of Reference Design

There are two distinct elements to the Reference Design:

### Mandatory

This comprises the information that defines Operational Functionality and is indicated in Interdepartmental Layouts (1:500), Departmental Layouts (1:200) and Room Layouts (1:50) for Key and Generic Rooms.

#### Non-mandatory

This comprises two elements;

- Information that has been developed to verify the feasibility of the Reference Design in terms of architecture and engineering – the area where Bidders will have freedom to propose innovative solutions; and
- Information developed for issue to Bidders in regard to site and servicing information.

#### 7.4 Schedule of Accommodation

The Schedule of Accommodation based on the Reference Design drawn layouts should be issued to Bidders with the target Schedule of Accommodation being made available for information only.

## 7.5 Non-Key and Non-Generic Room Layouts

There is a risk pertaining to the Room Layouts that have not been developed as part of the Reference Design in that there may be issues surrounding orientation and space requirements that will only become evident when these are developed following appointment of the Preferred Bidder. This risk is borne by NHSL but it is believed to be minor and manageable given the level of development in the Reference Design covers 52% of all spaces and covers the key and generic rooms.

## 7.6 Reference Design During Procurement

There is a concern that Bidders may seek to revisit the Schedule of Accommodation and Operational Functionality during the procurement process. Bidders must be advised that this is not an option given the investment made by NHSL in the Reference Design and revisiting the design would negate any advantages in having carried out this work. The absence of a Healthcare Planner on NHSL's advisory team during procurement is a risk. Given however the previous healthcare planning input to the project, this is deemed by NHSL to be a minor and manageable risk.

### 7.7 Reference Design Team Handover

The Reference Design Team for RHSC + DCN is being released to join Bidding teams. A thorough and detailed handover between the Reference Design Team and NHSL and Technical Advisory Team will have to be undertaken in the lead up to the conclusion of the Reference Design.

## 7.8 Key Action Points

The following are key action points arising out of the foregoing:

- NHSL to review and confirm the contents of this paper to allow the development of the ITPD and associated documents moving forward
- The definition of Operational Functionality rather than Clinical/Non-clinical Functionality to be developed in the Project Agreement.
- NHSL and Technical Advisor Team to be fully briefed on the Reference Design prior to departure of Reference Design Team.
- NHSL to confirm that the Reference Design complies with their requirements and output specification;
- All members of NHSL's dialogue team (NHSL and Advisors) to be briefed on the contents of this paper; and
- Bidders to be fully briefed on non-negotiable status of Reference Design.

## **Appendices**

Appendix A.	SFT & SGHD Standard Form Definitions_	25
Appendix B.	Matrix of Reference Design Deliverables	28
Appendix C.	RIBA Plan of Work	35
Appendix D	Draft Instructions to Bidders (to follow)	36

## Appendix A. SFT & SGHD Standard Form Definitions

## A.1. Scottish Futures Trust Standard Form PA

The following is an extract from the SFT Standard Form Project Agreement (NPD Model) Version 1 dated 16 June 2011. Note the reference to Operational Functionality in regard to Authority design approval.

### Authority design approval

12.5 The Authority confirms that, as at the date of this Agreement, it has reviewed such of Project Co's Proposals as have been initialled by the Authority and that, subject to any qualifications and/or comments notified by the Authority to Project Co in writing and set out in [ ] such proposals satisfy the Authority's requirements in respect of Operational Functionality, so far as can reasonably be determined given the level of detail of Design Data which has been disclosed to the Authority.

#### A.2. SGHD Standard Form PA

The following is extract from the SGHD Standard Form Project Agreement Non-profit Distributing (NPD) Model: Version 1. This outlines NHSL's responsibilities in regard to design approval and the reference to Clinical Functionality. The definition of Clinical Functionality, defined in Part 1 to the Schedule is also give.

#### **Project Agreement Main Body Clause 17.6**

### Board design approval

## Schedule to Project Agreement

PART 1 OF THE SCHEDULE: DEFINITIONS AND INTERPRETATIONS

Section 1: Definitions

In this Agreement unless the context otherwise requires:

## "Clinical Functionality"

- (a) the following matters as shown on the [1:500 scale development control plan]:
  - (i) the points of access to and within the [development site] and the [buildings];
  - (ii) the relationship between one or more [buildings] that comprise the [development]; and
  - (iii) the adjacencies between different Hospital departments [referenced to a drawing number or numbers];
- (b) the following matters as shown on the [1:200/1:100 scale plans] (referenced to a list of drawing numbers in Project Co's Proposals for example):
  - (i) the points of access to and within the [development site] and the [buildings];
  - (ii) the relationship between one or more [buildings];
  - (iii) the adjacencies between different Hospital departments; and
  - (iv) the adjacencies between rooms within the Hospital departments;
- (c) the quantity, description and areas (in square metres) of those rooms and spaces shown on the [Schedules of Accommodation];
- (d) the location and relationship of equipment, furniture, fittings and user terminals as shown on the [1:50 loaded room plans] in respect of:
  - (i) all bed and trolley positions;
  - (ii) internal room elevations;

- (iii) actual ceiling layouts; and
- (iv) [other project specific requirements might need to be considered, for example with regard to theatres and imaging departments]; and
- (e) The location of and the interrelationships between rooms within a department as shown on [ ] scale drawings, but only insofar as each of the matters listed in (a) to (e) above relate to or affect Clinical Use

# Appendix B. Matrix of Reference Design Deliverables

			ivera Categ					
Deliverable	Mandate & Fix Operational Functionality	OBC Costings	Planning and Third Party Consultations	Validate Design and Test Against OS	Enabling Works Design	Site Information for Bidders	Notes	Status
Schedules of Accommodation	<b>√</b>	<b>√</b>			_		Schedule of Accommodation to include all areas of the building comprising all rooms in departments plus hard and soft FM areas, circulation, plant and communication spaces.	Some elements mandatory (operational spaces, soft FM spaces) and some elements indicative (plant and communication space and hard FM and NPD Co accommodation)
Room Data Sheets	✓	✓					RDS for all rooms and space types	Mandatory - Sheet 1 for all rooms (general), Sheet 3 for all rooms (environmental parameters) and Sheet 4 - (groups 2, 3 and 4 equipment). Sheet 2 (finishes) for all rooms and Sheet 4 (group 1 equipment for all rooms) outline generic specifications that must be met. RDS for Project Co spaces with be the responsibility of the Bidders.
Equipment Schedules	<b>√</b>	<b>√</b>					Equipment Responsibility Matrix developed from RDS - this acts as equipment list and responsibilities matrix.	Mandatory - Groups 2, 3 and 4 equipment Indicative - Group 1 equipment
Development Control Plan + Urban Design 1:1000/1:500	<b>√</b>	<b>√</b>	<b>→</b>	<b>✓</b>	<b>✓</b>	<b>√</b>	To show both the planning of the area within the red-line and the interface with the wider site - 1:1000 and 1:500 site plans indicating building footprint, road adjustments, parking layouts, access, energy centre and support facilities, blue-light/emergency appliance access, outline landscape/public realm proposals – not limited to Reference Design redline site. Will include the bus, car parking, cycle route and Emergency Department route strategies developed to Planning stage for the scheme. Develop proposals for heli-pad taking cognisance of appropriate regulations and guidance. Proposals to take account of boundaries of land outwith NHS control, servicing/waste strategies, buses and public transport requirements, site-wide parking provisions,	Mandatory - those elements defined under 'Operational Functionality' i.e.:  (i) the points of access to and within the [development site] and the [buildings];  (ii) the relationship between one or more [buildings] that comprise the [development]; and  (iii) the adjacencies between different Hospital departments [referenced to a drawing number or numbers]  Indicative - everything else with exception of the above

				ble U				
Deliverable	Mandate & Fix Operational Functionality	OBC Costings	Planning and Third Party Consultations	Validate Design and Test Against OS	Enabling Works Design	Site Information for Bidders	Notes	Status
							flood protection plus feedback from Local Planning Authority/A&DS. Should also show flexibility, adaptability, expansion strategy. Also to include all services locations, points of interface; topographical information; planning site boundaries and extents for permitted development.	
Departmental Layouts 1:500	<b>✓</b>	<b>✓</b>	<b>✓</b>				1:500 layout plans for all levels identifying departmental adjacencies, departmental areas, and vertical circulation cores. Also to indicate entrance 'zones', service cores, ICT, Comms and Hub rooms, Hard and Soft FM spaces	Mandatory - those elements defined under 'Operational Functionality' ie:  (i) the points of access to and within the [development site] and the [buildings];  (ii) the relationship between one or more [buildings];  (iii) the adjacencies between different Hospital departments; and (iv) the adjacencies between rooms within the Hospital departments;  This to include Soft FM spaces. Circulation defined as a consequence of the adjacencies.  Indicative - all other elements (e.g. layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces etc)
General Arrangements Plans 1:200	<b>✓</b>	<b>√</b>					1:200 layout plans for all levels identifying room numbers, room areas (as-drawn), indicative structural grid integration, main service risers, vertical circulation cores. Window locations will be excluded and partition thicknesses will be standardised. Entrance zones indicated. FM, ICT, Hubs indicated. These drawings to be the basis for validating compliance with fire and escape requirements and servicing strategies.	Mandatory - those elements defined under 'Operational Functionality' ie:(i) the points of access to and within the [development site] and the [buildings];(ii) the relationship between one or more [buildings]; (iii) the adjacencies between different Hospital departments; and(iv) the adjacencies between rooms within the Hospital departments; Circulation defined as a consequence of the adjacencies; Soft FM spaces. Indicative - all other elements (e.g. layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces, corridors widths etc etc) and Communication spaces.

				ble U				
Deliverable	Mandate & Fix Operational Functionality	OBC Costings	Planning and Third Party Consultations	Validate Design and Test Against OS	Enabling Works Design	Site Information for Bidders	Notes	Status
General Arrangement Elevations and Sections.		<b>√</b>	✓				Elevations and Sections for indicative purposes only. Required for A+DS and PPiP only.	Indicative
Generic Room Layouts 1:50	<b>✓</b>	<b>√</b>					Generic - rooms. 1:50 layout plans indicating all fixtures/fittings and relevant codes, corresponding room elevations, equipment schedule, area analysis.	Mandatory - those elements defined under 'Operational Functionality' ie: (d) the location and relationship of equipment, furniture, fittings and user terminals as shown on the [1:50 loaded room plans] in respect of: (i) all bed and trolley positions; (ii) internal room elevations; (iii) actual ceiling layouts; and (iv) other project specific requirements, for example with regard to theatres and imaging departments; All other elements - indicative.
Key Room Layouts 1:50	>	<b>√</b>					Key - rooms. 1:50 layout plans indicating all fixtures/fittings and relevant codes, corresponding room elevations, equipment schedule, area analysis.	Mandatory - those elements defined under 'Operational Functionality' ie: (d) the location and relationship of equipment, furniture, fittings and user terminals as shown on the [1:50 loaded room plans] in respect of: (i) all bed and trolley positions; (ii) internal room elevations; (iii) actual ceiling layouts; and (iv) other project specific requirements, for example with regard to theatres and imaging departments]; All other elements - indicative.
Fire Strategy 1:200				✓			Reference Design Demonstrating Compliance. Supplemented in D+C Output Specification Design to show compliance with Technical Standards - not bespoke fire engineered solutions. Escape strategies also	Indicative

				ble U				
Deliverable	Mandate & Fix Operational Functionality	OBC Costings	Planning and Third Party Consultations	Validate Design and Test Against OS	Enabling Works Design	Site Information for Bidders	Notes	Status
							to be developed. Services input essential	
Interior Design + Artwork Concepts		✓	✓	✓			D+C Specification + outline strategy. Part to be included in Development Control Plan and Site Plan.	Indicative
Wayfinding Strategy		<b>✓</b>	<b>✓</b>	<b>√</b>			D+C Specification with supporting drawings/strategy report.	Indicative
Flexibility and expandability			<b>✓</b>	<b>√</b>			D+C Specification with flexibility clearly defined.	Indicative
Supplies, Storage, Distribution and Waste Management (Soft FM)	<b>√</b>	<b>&gt;</b>					Demonstrated in Operational Functionality drawings with supporting text in the Soft FM Construction Specifications.	Mandatory
Decontamination and Control of Infection (HAI- SCRIBE)				<b>√</b>			Developed for verification purposes only.	Indicative

				ble U				
Deliverable	Mandate & Fix Operational Functionality		Third Party	Validate Design and Test Against OS	Design	Site Information for Bidders	Notes	Status
BREEAM				<b>√</b>			Reference Design to be tested for compliance. Requirement for rating be covered in D+C Output Specification. Pre assessment required by reference design team to validate and inform the design.	Indicative
Geotechnical Site Investigation					<b>√</b>	<b>√</b>	Reference Design to be tested for compliance. Information to be available to bidders.	N/A (Data Room status)
Decanting, Phasing,				<b>✓</b>			To validate that Reference Design is compliant with strategy.	Indicative
Traffic Impact Assessment and Traffic Management Plan			<b>✓</b>			<b>√</b>	Required for PPiP. Also Reference Design to be validated against the plan.	Indicative
Security Strategy				<b>√</b>			Reference Design to be tested for compliance. Information to be available to bidders through D+C Output Specification and in Data Room.	Indicative
Construction Phase restrictions and controls						<b>√</b>	Any restrictions / controls required to be outlined in D+C Output Specification and in Data Room.	Indicative
ICT strategy	<b>✓</b>	<b>√</b>		<b>√</b>	<b>√</b>	<b>√</b>	Server Room locations and numbers , operational policies and area schedules req for reference design.	Mandatory
Helipad	<b>√</b>	<b>✓</b>					Reference design to locate the helipad within general massing and have been successfully tested against aviation requirements.	Indicative

## Appendix C. RIBA Plan of Work

RIBA Plan of Work indicating Works Stage C - Concept Design

# RIBA W Outline Plan of Work 2007

The Outline Plan of Work organises the process of managing, and designing building projects and administering building contracts into a number of key Work Stages. The sequence or content of Work Stages may vary or they may overlap to suit the procurement method (see pages 2 and 3).

	RIBA Work Stages			Description of key tasks		
				Identification of client's needs and objectives, business case and possible constraints on development.  Preparation of feasibility studies and assessment of options to enable the client to decide		
	rat lo			whether to proceed.		1 Business
	Preparation				Development of Initial statement of requirements into the Design Brief by or on behalf of the	junithcation
	-	В	Design Brief		client confirming key requirements and constraints. Identification of procurement method, procedures, organisational structure and range of consultants and others to be engaged for the project.	2
ı						Procurement strategy
					Implementation of Design Brief and preparation of additional data.	
		C	Concept		Preparation of Concept Design Including outline proposals for structural and building services systems, outline specifications and preliminary cost plan.	
					Review of procurement route.	2A
	Design				Development of concept design to include structural and building services systems,	Design Brief and Concept Approval
	ä	D	Design		updated outline specifications and cost plan.	
		Ĭ	Development		Completion of Project Brief.	
					Application for detailed planning permission.	
		E	Technical Design		Preparation of technical design(s) and specifications, sufficient to co-ordinate components and elements of the project and information for statutory standards and construction safety.	28 Detailed Design
	_	_	Production	F1	Preparation of production information in sufficient detail to enable a tender or tenders to be obtained.	Approval
	ig.	r	Information		Application for statutory approvals.	
	P			F2	Preparation of further information for construction required under the building contract.	
	Pre-Construction	G	Tender Documentation		Preparation and/or collation of tender documentation in sufficient detail to enable a tender or tenders to be obtained for the project.	
	~				Identification and evaluation of potential contractors and/or specialists for the project.	
		н	Tender Action		Obtaining and appraising tenders; submission of recommendations to the client.	3C
i					Latting the building contract appointing the contractor	investment decision
ı	_	,	Mobilisation		Letting the building contract, appointing the contractor.  Issuing of information to the contractor.	
ı	Construction				Arranging site hand over to the contractor.	
ı	=		Construction		Administration of the building contract to Practical Completion.	
ı	ð	ĸ	to Practical		Provision to the contractor of further information as and when reasonably required.	
			Completion		Review of information provided by contractors and specialists.	4
1	42	67	75938			Readiness for Service
	:		Post Practical	ш	Administration of the building contract after Practical Completion and making final inspections.	

Source: RIBA www.architecture.com

# Appendix D. Draft Instructions to Bidders (to follow)

# Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France



#### **ACTION NOTES**

Commercial in Confidence – not disclosable under the Freedom of Information (Scotland) Act 2002

Meeting Title: RHSC + DCN - Little France - PROJECT STEERING BOARD

**Date/Time:** Friday 10<sup>th</sup> August 13:00 – 15:00

**Location:** Project Office, 56 Canaan Lane, Edinburgh

Attendees: Jackie Sansbury Project Sponsor - NHSL

Susan Goldsmith Director of Finance – NHSL (Chair)
George Walker Non Executive Director - NHSL

Mike Baxter Deputy Director (Capital + Facilities) – SGHSCD

Andrew Bruce Associate Director - SFT
David Farquharson Medical Director – NHSL

Fiona Mitchell Dir. Ops – NHSL - Women's, Children's + Neurosciences

Janice Mackenzie Project Clinical Director - NHSL

Brian Currie Project Director – NHSL

Stuart Wilson Director of Communications - NHSL
Chris Bowring Director of Finance – NHS Fife

Peter Reekie Director Finance + Structures – SFT

Iain Graham Director of Capital Planning and Projects – NHSL

Carol Potter Associate Director Finance - NHSL

Susan Lloyd Partnership Lead – NHSL

#### NOTES Item

**Apologies:** 

Item		
1.	Previous Notes + Matters Arising	Lead
	Taken as read.	
2.	Dashboard	
	SA6	
	SA6 was completed and signed by Susan Goldsmith and Stephen Gordon for NHSL and Consort Healthcare at mid day on 10 <sup>th</sup> August, 2012.	Noted
	SA Enabling	
	A draft paper to NHSL's F+PR Committee of 15 <sup>th</sup> August, 2012 has been prepared recommending approval to seek Consort lender's approval to the legal and commercial terms recently agreed with Consort for the Enabling Works (TAWO's 156 – 161).	
	Various revisions are to be made to this paper comprising:	вс
	SGHSCD approval in principle to fund unforeseen costs of circa £2.5m for "Off Site" flood works and circa £2m for additional "Enabling Works" costs. This approval is conditional on strict management of contingencies/risk allowances, final tendered prices and detailed funding draw down requirements. NHSL to provide SGHSCD with timeline funding requirements for both enabling works and equipment.	
	Commentary on forecasted reduction in BCIS inflation indices and impact on capital cost.	
	Ability to obtain completion of SA Enabling by mid October 2012 is wholly dependent	

# Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France



### **ACTION NOTES**

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Item		
	on Consort Healthcare and whilst wishing to maintain pressure on Consort past performance in relation to SA6 may suggest this is not achievable.	
	Anticipated date for commencement of Commissioning is to be added (2 <sup>nd</sup> April, 2017).	
	OBC Approval	
	MB advised that approval should be anticipated late Aug / early Sept 2012 from SGHSCD.	Noted
3.	Financial Update	
	Paper to be revised and re presented at next Project Steering Board.	СР
4.	Strategic Delivery Programme	
	Version 5.3 (3 <sup>rd</sup> August 2012) tabled and key milestone dates noted. Start of commissioning date (2 <sup>nd</sup> April, 2017) to be brought to F+PR 's attention and added to programme.	ВС
	Hospital Operational date now anticipated as June 2017 should OJEU be released on 1 <sup>st</sup> November, 2012.	ВС
	MB commented that in comparison with Glasgow Southern's actual construction duration this programme seemed to be generous. BC reminded all present that whilst acknowledging that the construction duration illustrated may be seen as "conservative" the duration used was based on construction methodologies and durations used by BAM Construction on the previous capital funded project and adjusted for the current scope of works. Any potential shortening of construction duration could also be offset by an arguably extremely challenging 3-4 month period (as requested by SFT some 12 months ago) between preferred bidder and financial close being unachievable. This is particularly so given town planning procedures and the increasing likelihood of a funding competition and availability of finance.	
	All Enabling Works, Off Site Works and Clinical Enabling Works to be added when dates are available.	ВС
5.	ITPD Evaluation Criteria	
	Project Steering Board approved the paper tabled for incorporation in the ITPD suite of documentation and issue to SFT.	Noted
6.	FM Services Matrix	
	Project Steering Board approved the paper tabled for incorporation in the ITPD suite of documentation and issue to SFT.	Noted
7.	ANY OTHER BUSINESS	
	Risk Review GW enquired as to progress with an updated risk register. BC advised that a full	

# Royal Hospital for Sick Children and Department of Clinical Neurosciences at Little France



### **ACTION NOTES**

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	review by risk owners had recently been completed and following a team review (w/c 27 <sup>th</sup> August) a revised risk register would be tabled at the next Project Steering Board.	вс
	Ongoing Maintenance of existing RHSC GW asked what implications now exist for ongoing back log maintenance programme for the existing RHSC + DCN buildings given the now anticipated 2017 opening of the new development. FM advised that following recent expenditure, the existing RHSC meets current HEI requirements in relation to the main hospital but that ancillary buildings in Rillbank Terrace are not in good condition and more vulnerable to deterioration. FM added that SKFF are sympathetic to this situation and may offer limited financial assistance.  JKS commented that equipment replacement was also an issue under examination.	
	Market Communications SG asked if communication to NPD Bidder market was required given completion of SA6. AB suggested consideration be given to release of PIN Notice one month in advance of OJEU Notice. Project Team to consider.	вс
	Press Release SW advised that NHSL are in discussions with Consort in relation to a joint press release on 13 <sup>th</sup> August following completion of SA6 (SGHSCD and SFT to be consulted). Internal communication within NHSL to all staff took place on the afternoon of 10 <sup>th</sup> August.	sw
8.	DATE & TIME OF NEXT MEETING	
	Friday 14 <sup>th</sup> September 15:00 – 17:00, Project Office, 56 Canaan Lane	All



#### COMBINING PRICE AND QUALITY IN EVALUATION – DISCUSSION PAPER

#### **OVERVIEW**

The evaluation methodology for the RHSC/DCN project is now largely agreed. The only remaining task is to calibrate the mechanism being used so that the desired balance between price and quality is achieved.

The mechanism follows SFT requirements in that price accounts for 60% of the available marks and quality 40%. NHS Lothian's view has been that this split undervalues quality. In order to address this, the evaluation methodology incorporates features that maximise the impact of quality evaluation, these being:

- The majority of quality evaluation elements are assessed on a pass/fail basis, with the scored element reserved for key differentiating factors
- Commercial considerations are dealt with entirely within the price score, freeing the available quality marks to be focussed on design, build, FM and management/strategic issues
- The lowest price bid is awarded the maximum 60 marks. The quality mechanism has been set up so that the highest scoring quality proposals are given the maximum 40 marks, with the quality score of other bids being marked in proportion to this
- The price marks awarded are calibrated so that proposals that are close in price terms are given similar price marks, thus making the quality score more likely to be the deciding factor. As price differentials become greater, the price marking system becomes more sensitive so that a bid significantly more expensive than the lowest priced will lose a far higher number of price marks.

#### **KEY VARIABLE**

The key variable in finalising the calibration of the evaluation model is the marking scheme for the price element. By adjusting this, the price element can be made more or less sensitive and so more or less of a deciding factor in the overall evaluation. It is this element that NHS Lothian will need to consider so that the mechanism can be finalised.

To assist in this process, an exemplar evaluation is set out below that shows how the sensitivities apply.

#### **EXEMPLAR EVALUATION**

The example given here assumes that NHS Lothian receives three proposals. The key details of the evaluation are shown in the table below.

	Economic Cost £000	Quality score awarded
Bid A	200,000	80%
Bid B	185,000	60%
Bid C	169,000	20%

The three bids can be characterised thus:

• Bid A is of very high quality, 'iconic', but expensive compared to the others

- Bid B is of acceptable quality and is lower in price than Bid A it is satisfactory in that it meets all requirements, rather than good or excellent
- Bid C is of poor quality but is very low in cost.

Under the current marking scheme, the three bids would be given the following marks:

	Price	Quality	Combined	Rank
Bid A	0	40	40	3
Bid B	35	30	65	2
Bid C	60	10	70	1

Bid C would win here because its low price dominates the evaluation. It is so low in price that Bid A has lost all of its marks under the price evaluation. The scenario results in a poor quality bid being ranked first.

In order to overcome this, a simple approach could be taken in that a **minimum** quality mark could be set as a threshold for acceptability of a bid. For example, if a bid is required to score at least 50% in the quality evaluation to be deemed acceptable, then Bid C would be eliminated. Such a threshold is not currently built into the mechanism.

Were this to be the case, then the results would be as follows:

	Price	Quality	Combined	Rank	
Bid A	40	40	80	2	
Bid B	60	30	90	1	
Bid C	n/a	n/a	n/a	n/a	

Now Bid B is ranked first – it is £15 million cheaper (about £1.5 million per annum in unitary charge terms) and of acceptable quality. Were Bid B to be very slightly more expensive, by £3 million in NPV terms (£188m compared to £200m for Bid A), then Bid A would become the highest ranked.

It is this sensitivity that requires to be tested, with a view to establishing how much more NHS Lothian is willing to pay in price terms in order to obtain higher quality.

#### **Ernst & Young**

#### September 2012



**NOTES** 

Meeting Title: Project Meeting with SFT – Procurement and Competitive Dialogue Issues

**Date/Time:** 26 October 2012, 9.00-1.00

**Location:** Minns Room, Project Offices 56 Canaan Lane

Attendees: NHS Lothian: Scottish Government: Scottish Futures Trust:

Susan Goldsmith (Chair) Mike Baxter Kerry Alexander Brian Currie Peter Reekie

lain Graham External Advisers: Donna Stevenson Susan Lloyd Simon Alderson, MM

Janice MacKenzie Richard Cantley, MM NHS Dumfries & Galloway:
Carol Potter Andrew Orr, MacRoberts Katy Lewis
Jackie Sansbury Michael Pryor, Ernst & Young Dennis O'Keeffe

Sorrel Cosens

:em		Action
1.	Introductions	
2.	Cost v Quality evaluation	
	MP introduced the paper written on behalf of NHSL by Ernst & Young, which outlined proposals for calibrating the evaluation mechanism to reach the desired balance between cost and quality.	
	PR emphasised that there was no intention to undervalue quality in the standard form proposed by SFT and that the reference design allows NHSL to specify a high degree of quality in mandatory criteria. SG accepted that the building will be of good quality, following the work of the reference design to specify the Board's requirements, and highlighted NHSL's need to find a partner for a 25 year relationship beyond construction was a critical quality issue.	
	It was agreed that the distribution curve used for price evaluation is sensitive. NHSL to focus on finalising the curve and review FM weightings on ITPD questions.	NHSL
	Pass/fail questions Discussion about questions with a clear compliance threshold that bids could be judged to simply pass or fail. Agreed that NHSL would revisit these questions.	NHSL
	Awarding the maximum quality score to the highest scoring bid The Project Agreement (PA) outlines the high quality threshold set: any derogations to change the minimum standards suggest that Project Co are expecting to fail to deliver what NHSL has specified is a quality service. Derogations have to be agreed.	
	Consensus that there should be a mechanism for adjusting the scores and NHSL will review the legal and commercial elements to be scored against 'price'.	NHSL
	Awarding the maximum score of 40 to the highest scoring bid in terms of quality Agreed that rather than pursue the proposal to automatically award a maximum score of 40 to the highest quality bid, NHSL would look at calibrating the quality	NILICI
	threshold. DO'K suggested that the quality threshold should be based on performance, process and product.	NHSL

S:\Reprovision Projects\2. Joint RHSC & DCN\Meetings\Project Steering Board\18. 9th November 2012\RHSC + DCN with SFT 261012 Notes.doc



NOTES

tem		Action
	MB supported the need to reassure staff and Board members that NHSL will not accept bids below a 'quality threshold', and this should be determined.	
3.	Payment mechanism	
	All agreed the proposal that the payment mechanism should be based on sessions rather than days.	
	Performance levels and termination thresholds to be factored into service level specification. Need to fully understand operational implications and requirements.	
	Gearing agreed as 300, to be reviewed prior to the pre-ITPD Key Stage Review (programmed for February 2012).	
	Discussion about benchmarking with recent projects. SG will contact the Finance Director at Alder Hey, as they have just appointed their preferred bidder.	NHSL
4.	Programme, and option to down-select bidders during competitive dialogue	
4.	Strategic programme version 5.4 referred to for discussion.	
	Strategic programme version 5.4 referred to for discussion.	
	PR outlined SFT's view that a reference design approach allows for less design development through competitive dialogue, therefore lower costs for bidders than without. However, it also increases the threshold for bidder engagement in the first instance. With the market being wary of bid costs, a longer programme is a disincentive.	
	Bidders for the Inverness project (with a reference design) fed back to SFT that competitive dialogue could have been shorter.	
	The Glasgow Colleges project (with no reference design) have the same amount of competitive dialogue time scheduled as for re-provision of RHSC and DCN.	
	Down selection would take extra time as a step not yet accounted for. It would improve the chances of bidders committed to final submission costs, and could therefore be popular with the market	
	Discussion re: shortening competitive dialogue period to lengthen time from appointment of preferred bidder to financial close.	
	MP asked if a post PB funding competition was likely. This was not answered.	
	SG expressed anxiety if bidders reduced from three to two, particularly if one of the bidders was associated with the current PFI partner. Taking three bidders from ITPD to final submission continues to be NHSL's preferred route.	
	SFT to be advised of progress with Consort lenders' approval to SA Enabling to enable a decision to be made on the date of OJEU release.	
5.	OBC approval funding conditions	
	MB reported that SGHSCD and SFT were finalising the funding conditions letter for the OBC. SG requested that the letter be shared in draft with NHSL, considering the	00115
	previous agreement to work towards OJEU release in two weeks.	SGHD



NOTES

Item		Action
	BC reported that Technical Cost Summary 5B had been completed and shared with SFT, which addressed the query regarding movement of the capital cost since OBC submission.	
	SG and CP to review impact on the Accounting Treatment. SFT confirmed that this is common to all NPD projects and that they would address this with all Boards.	SFT / SGHSCD
6.	Any other business	
	BC raised likely questions from prospective bidders on SFT role in procurement and beyond. PR confirmed that there was no intention of SFT being involved in evaluation during competitive dialogue, although they may attend some meetings in an oversight role and would continue to implement the established KSR process.	
	Funding package: keep options open for now. Session to be set up by SFT / SGHSCD at the appropriate time for all procuring bodies.	SFT / SGHSCD
	Awareness of Independence Referendum timing and potential impact on project. Nothing NHSL or others can do about it, but potential bidders understandably have this in mind too.	
	NHSL and NHSD&G commented that a 'lessons learned' workshop with further advanced NPD projects and procuring bodies would be very beneficial. SFT to organise.	SFT

#### **RHSC/DCN Re-Provision**

#### **Procurement Strategy (Draft)**

#### Introduction

The Scottish Government draft budget of November 2010 announced that the RHSC and Division for Clinical Neurosciences re-provision projects would be funded through the Scottish Government's revenue financed Non Profit Distributing (NPD) model.

This documents sets out a strategy by which NHS Lothian (NHSL) will procure these major facilities using the NPD model. The NPD procurement route is taken as a given and this strategy does not address the merits of other potential procurement routes that may or may not be possible.

Appendix A identifies the documentation required during the procurement and the organisation(s) responsible for the preparation of each and the required timescales for availability.

#### **Background**

The Outline Business Case Addendum submitted in March 2011 to the Scottish Government Health Directorate (SGHD), explained the methodology used in evaluating the different site options and in reaching a preferred option. The conclusion of the options appraisal exercise was that the RHSC and DCN would be procured as a single project and would be situated on the site of the Royal Infirmary of Edinburgh (RIE) at Little France. The site for the new facility is identified as the existing car park B. This option is referred to within section 4 of the OBC Addendum as Option 1A. It is not the purpose of this strategy to revisit the options appraisal exercise, but to identify the steps that now need to be taken to undertake the procurement in a manner compliant with procurement legislation and best practice and therefore likely to achieve the best possible outcome for the NHS and patients.

SGHD have raised limited comments on the OBC Addendum and these have been responded to. They have noted "the position of the project as reflected in the OBC Addendum and (their) support (for ) the direction of travel".

Key risks relevant to the procurement of the project should be included in the project risk matrix.

#### <u>Project Scope</u>

The project will include the design, construction, financing and maintenance of the new RHSC and DCN facility within a single building on the RIE car park B site at Little France. Hard facility management services and lifecycle maintenance will be included in the project scope but not soft facility management services.

The OBC addendum identified a capital cost for the project of £173m to be funded through the NPD route. Additionally a further £44.4m of capital was identified as required under a range of headings but falling out with the NPD cap. A further £18.5m of expenditure on enabling works is expected to be funded through a change to the existing RIE PFI contract with Consort Healthcare. The Scottish

Government draft budget identified, in very broad terms, that £250m of capital expenditure could be funded through the NPD route for the project. That figure is to include VAT, Development Costs, Equipment and Enabling Works.

The SGHD offer letter of 22<sup>nd</sup>. March 2011 set out the headings under which funding would be provided by the Scottish Government and identified expenditure that would remain, in part or in whole, the responsibility of NHSL.

A letter from SFT of 2<sup>nd</sup>. June 2011 set out how and when the funding cap for the project would be agreed. This letter also identified that a contingency would be held centrally and that application would have to be made to access the contingency sum. Further detailed comments on the project funding were also contained in this letter. This letter was discussed with SFT at the F&PR meeting of 8<sup>th</sup>. June and further discussion is anticipated.

A full OBC is now being prepared by the project team and is anticipated to be submitted to SGHD in [mid/late September 2011] . SGHD require OBCs a month in advance of Capital Investment Group (CIG) meetings. The next scheduled meetings are in mid September and mid November. A mid/late September submission does not conform to SGHD's timescales but it has been indicated that a special meeting may be possible due to the importance of the project.

Having a clear procurement strategy in place is fundamental to the project and therefore to the successful submission of the OBC.

The procurement strategy must ensure that value can be extracted from private sector innovation and expertise, in order to minimise project whole life costs.

Early availability of the new facilities is clearly very important. This desire, however, must be balanced with the need to allow adequate time for negotiations so that a robust and value for money solution is reached that will stand the test of time.

A decision will be required on what aspects of FF&E, ICT and migration and other cost areas are to be included in the Project Scope of the NPD project..

The inclusion of hard FM will probably result in employees transferring to the private sector partner under TUPE regulations. Detailed consideration of this highly sensitive issue should begin as soon as possible. There is a need to plan for this at an early stage by opening discussions with employees and their representatives.

A significant part of the OBC will describe the detail of the clinical activity for which the facilities are to be developed. SFT have advised that they propose to appoint health care planners to offer challenge to the clinical activity assumptions on behalf of the Scottish Government as the ultimate funders of the project.

#### Key points for NHSL decision/confirmation

- Confirm Mid/Late September OBC submission to SGHD
- Develop detailed timetable for OBC production and internal/other NHS board approvals

- Acknowledge that TUPE transfers are likely and begin to plan consultation with employees. SFT/SGHD may have to be asked formally to confirm TUPE transfer as a requirement.
- Determine what aspects of FF&E, ITC, migration and other costs will be included in NPD cap and reduce up front capital requirement as far as possible.

#### **Consort Relationship**

The RIE was procured as a PFI contract with Consort Healthcare. The PFI Project Agreement runs until [20xx]. It is not part of the role of this procurement strategy to review the content of that project agreement or to comment on its strengths or weaknesses.

It is, however, fundamental to the successful procurement of the combined RHSC/DCN that all relevant issues that impact or could impact on the Project Agreement with Consort are identified and resolved in advance of the commencement of the formal procurement i.e. before an OJEU notice is published. SGHD have been clear that the board will not be permitted to commence the formal procurement before that has been achieved and this view is known to be shared by SFT. The issues concerned will include the land swap, physical connection between the new facility and the existing RIE, necessary relocation of existing RIE clinical facilities, enabling works etc. A full list of issues that need to be resolved with Consort is contained in the letter from the Director of Finance to Consort Healthcare of 6<sup>th</sup>. June . This letter set out the board's position on each of the issues.

The need to have a clear strategy for the negotiation of these issues and urgency to be injected into the negotiations cannot be over estimated. Without these issues being resolved, the board will be without some of the fundamental requirements for the ultimate success of the project, including the right to build on the car park B site. Part of the strategy must be the need for clarity on who is leading the negotiations with Consort, how that person or group feeds in to the rest of the RHSC/DCN project and who, in terms of a scheme of delegation, has the authority to approve the outline agreement negotiated with Consort. Resolving the issues with Consort Healthcare is part of the RHSC/DCN project, not something separate from it and must be treated throughout as such.

The negotiations with Consort must be conducted against a backdrop of the need to attract a significant number of bidders to the project. This will only be achieved if potential bidders can be convinced that Consort are not being given any form of advantage, either explicitly or implicitly, and that there is therefore a level playing field across all bidders. The most likely way ultimately to secure the best clinical and commercial deal is to attract the greatest possible number of high quality bidders to the project. Potential bidders will have to be convinced that the baord has resolved the Consort issues, otherwise the prospect of the procurement process becoming seriously delayed as a result of further negotiations with Consort will act as a serious deterrent to potential bidders. Potential bidders will be considering a number of projects for which they might bid, both in this country and overseas. The board needs to remain conscious throughout the procurement that the N project is in a competitive position so far as attracting bidders is concerned.

The board has made claera in the 6<sup>th</sup>. June letter that it wishes strongly that early priority be given by all parties to the negotiations with Consort so that these can be completed to a timetable that does not delay the submission of the Outline Business Case. It would be pointless to submit an OBC

without resolution of the Consort issues. The Consort issues will have to be resolved well before the planned mid/late September 2011 date for the OBC submission, so as to allow adequate time for internal board approvals. This means that engagement with Consort Healthcare must begin very soon and the letter makes clear that the board is pushing for negotiations to commence within weeks.

#### Key points for NHSL decision/confirmation

- Develop strategy for Consort negotiations [identify who is to be part of negotiating team and set date for pre-meeting to agree how to tackle negotiations]
- Identify timescale for Consort negotiations to align with OBC submission and internal approvals
- Decide how those leading Consort negotiations to be brought fully into the governance of the project [this should be by having George Curley as a member of the Project Board]
- Identify body with authority within NHSL to approve outline agreement with Consort [scheme of delegation being developed must make this clear]

#### **Procurement Route**

It is anticipated, and required by SFT/SGHD, that there will be sufficient risk transfer to the private sector for the project to be classified as non-government for national accounts purposes under the European System of Accounts 1995 (ESA 95). For assets to be non-government the private sector partner must bear construction risk and at least one of availability or demand risk. The standard NPD contract, which SFT have developed and which has to be followed for this project, has been designed to facilitate a project being classified as non-government.

The procurement process will be carried out in accordance with public procurement legislation under the competitive dialogue procedure.

#### **Design Development**

Both projects have been under consideration for a number of years and, prior to the announcement in the November 2010 announcement, were expected to follow a traditional design and build procurement route. A considerable amount of design work has therefore been undertaken, more so for RHSC than for DCN, although it is difficult to express this in terms of the RIBA Scheme of Work.

Notwithstanding that RHSC and DCN are now to be re-provided in a single building, some of the extensive design work previously undertaken will remain valid. Particularly relevant will be the extensive clinical and wider stakeholder engagement previously undertaken. The Project Team are, understandably, anxious not to have to undertake further extensive clinical engagement which would necessitate utilising scarce clinician time. Given the design work already undertaken, the question arises as to how far the design of the new facilities should be taken before further design becomes the responsibility of the Preferred Bidder. There are many issues for consideration as part of resolving this issue.

The board's advisers, Davis Langdon and Mott McDonald, have set out four broad options as follows;

- Option A Mandate Clinical Functionality
- Option B Mandate Full Design
- Option C Mandate Full Design plus novate design team to Preferred Bidder
- Option D [Brain what exactly is option D?]

Following discussion with advisers and SFT it has been decided, subject to formal approval by the Project Baord,, to go forward with Option A. With this option the design will be developed only to the stage necessary to fix clinical functionality and only elements of the design required to prove the robustness of the clinical functionality will be developed and then released for information to bidders. The clinical functionality elements will then be mandated in the ITPD and bidders will not be permitted to depart from them.

This approach is a departure from what normally happens in a PPP type project where the procuring authority's requirements are expressed in an output specification. There is however, increasing precedent for procuring authorities to undertake a degree of design work in the early stages of a project and then to pass this to bidders either as mandatory or as an exemplar. The board's advisers have had contact with potential bidders and this has lead them to the view that Option A will be acceptable to them.

Whilst there are considerably advantages and disadvantages of each option, option A has the distinct advantage that, of the four options, it allows bidders the greatest opportunity to bring innovation to their bids. This could be in the construction and services solutions they propose as well as in the overall construction period. The Competitive Dialogue stage must be organised to give the best possible opportunity to identify and interrogate innovations claimed by bidders and to assess their impact on the cost and timescale of the project.

The ITPD will have to identify those aspects of the design which the board wishes to mandate and which are therefore "non-negotiable". In order to allow bidders the freedom to innovate, "non-negotiable" aspects should be limited, as is intended, and their interpretation should be kept quite narrow.

The Project Team will need to carefully consider the level of clinical engagement required as Option A develops and during the Competitive Dialogue stage. There will undoubtedly need to be some engagement with each bidder during the competitive dialogue stage. If nothing else this will be expected by bidders. The level of clinical engagement will have to be closely controlled by the Project Team so as not to place too much burden on clinicians whilst also allowing bidders the opportunity to present and discuss their developing proposals with the ultimate end users of the facilities.

Nightingales have been undertaking the design work for so far and are continuing to do so. This could be a major difficulty if Nightingales were, following the completion of their work and the formal commencement of procurement, to join a bidders team. This would quite likely be seen by

other bidders as giving the Nightingales consortium a distinct advantage and therefore not provide a level playing field across all bidders. The Project Director has therefore begun discussions with Nightingales to establish whether agreement can be reached with them that will prohibit them joining a bidding consortium. The indications are that such an agreement with Nightingales will be possible. If such an agreement cannot be reached, and a decision on this is required urgently, and Nightingales decide to leave the project in order that they are free to join a bidding consortium, the project faces two immediate problems. Firstly who will replace Nightingales and secondly how great will be the delay before a suitable replacement with excellent healthcare facility design experience can be identified and brought on to the project.

#### Key points for NHSL decision/confirmation

- Develop detail of scope of design to be included in option A [ this now seems to have been done in the paper prepared by Davis Langdon and issued at the 9/6/11 Working Group]
- Decide how "non-negotiables" to be expressed
- Identify clinician and wider stakeholder engagement and reflect in Resource Plan
- Formally approve Option A at next Project Board meeting
- Push discussions with Nightingales to an early conclusion and prepare formal agreement as required

#### **Procurement Stages**

The Outline Business Case currently in preparation is to be presented to the SGHD in Mid/Late September2011 for consideration at a special CIG meeting as soon as possible thereafter. The details of how in general OBCs submitted for NPD projects will be reviewed and approved between SFT and SGHD are still to be finalised. In particular the number and timing of Key Stage Reviews and Gateway Reviews is still being agreed between SFT and SGHD. The timings outlined below are therefore subject to confirmation.

It is expected that SFT will review the OBC and prepare a report for SGHD. SGHD approval to the OBC will be required at the Capital Investment Group (CIG). The question of whether ministerial approval is a requirement beyond CIG approval needs to resolved as it will have an obvious impact on the project timescale. Normally the outcome of OBCs presented to CIG is not known for up to six weeks. This timescale allows for ministerial approval. SGHD have indicated that they will expedite the decision making as far as possible.

#### Key points for NHSL decision/confirmation

 SFT and SGHD to be asked to confirm as soon as possible the number and timing of Key Stage Reviews/Gateway Reviews.

#### **OJEU**

The first formal stage in the procurement is the publication of an OJEU notice.

Following SGHD approval of the OBC a pre-OJEU it is expected that a Key stage review will be carried out by SFT and that in order to avoid confusion and duplication the mandatory Gateway Review process will be carried out at the same time and a joint report prepared for the Chief Operating Officer as Project Sponsor. After the successful outcome to this stage of the project, the project will proceed to publish an OJEU notice. This essential step represents the formal commencement of the project procurement.

In response to the publication of the OJEU notice, interested parties will be invited to make an expression of interest. In return they will receive a Memorandum of Information (MOI ) for the project and a Pre Qualification Questionnaire (PQQ)

#### Key points for NHSL decision/confirmation

- Confirmation that advisers are preparing and submitting the OJEU notice [Is this Davis Langdon or Motts]
- Confirmation that the OJEU notice can be approved at the Project Board and does not need approval at a higher level

#### Memorandum of Information (MOI)

The Memorandum of Information is an opportunity for NHSL to market the project to potential bidders. It should therefore be a well presented and comprehensive document and provide project information in sufficient detail to give potential bidders a good understanding of the project including why it is being undertaken and the key issues. Bidders will be looking for comfort that NHSL are clear what they wish to procure, clear on the timescales for procurement and have committed the resources to enable them to keep to the timescale and that neither the requirement nor timescales will change materially. The MOI should also confirm that NHSL have the necessary internal and governmental authorities in place to permit them to undertake the procurement process. Appendix B to this strategy outlines the key sections to be included in the MOI.

#### Key points for NHSL decision/confirmation

- Although advisers [ Davis Langdon or Motts?] will lead the preparation of the MOI who
  within the Project Team will provide input to this process and recommend the document for
  approval.
- Who will be responsible for the production of each section [see appendix B for sections required]
- Confirm that MOI will be approved at Project Board and not at any other level

#### Pre-Qualification Questionnaire

The content of the PQQ, how responses will be evaluated, including the scorings and weightings to be allocated for each area, are all very important questions for the Project Team to consider. Whilst advisers will have quite standard PQQs that can be made available quickly, the Project Team must consider what is really important to this project and ensure that these features are fully examined in the questions asked of bidders. How qualitative and quantitative aspects of the PQQ will be blended to give an overall outcome also needs to be carefully considered.

EU procurement rules stipulate a minimum period for the return of completed PQQs, the period varies depending on how the OJEU notice was placed and other features that advisers will be able to guide NHSL on. Once the date for the return of the PQQs has passed they will be evaluated by the Project Team and identified others and the board's advisers using a formal scoring methodology. It is essential that in advance, the resources to enable this evaluation to be undertaken diligently and speedily are identified and committed. This will be a combination of board and adviser resource and should be identified in a Resource Plan prepared for the project. The Project Team will need to decide whether to invite those submitting PQQs to attend a presentation but it is recommended that they do so. The weighting, if any, given to the presentation will also need to be decided and identified in the PQQ evaluation criteria.

Bidders unsuccessful at the PQQ stage are entitled to feedback on their submissions and the Project Team will have to be able to demonstrate that it followed a fair and transparent process in reaching its decision and that it used only the stated evaluation criteria.

The three bidders scoring highest in the evaluation of PQQs will be invited to go forward to the dialogue phase of the procurement.

The Board should be quite clear that it will take forward three and only three bidders to the competitive dialogue phase of the procurement. The temptation to take forward more than three bidders must be avoided. There are several reasons why this is the case. It is only necessary that there is some differentiation in the marking between the bidders ranked third and fourth. This differentiation can be narrow, it does not have to be by a wide margin.

The reasons for taking forward only three bidders can be summarised as follows;

- Taking a fourth bidder through the initial stages of the dialogue phase, whether to an
  interim submission or final bid stage, will place a considerable burden on Project Team
  resources and advisers (workload will be increased by a third) and, as such, will result in
  increased adviser time and costs.
- The time span for the dialogue phase will be extended over what would otherwise be the case.
- Potential bidders will expect that only three will be shortlisted as this will be standard for
  other NPD projects and bidders are likely to question the intention to shortlist four bidders
  on this project. Bidders will recognise that their chances of securing the project are
  significantly enhanced when they are in competition with only two others rather than three.

• It is unlikely that the bidder placed fourth in the PQQ evaluation will emerge ultimately as the preferred bidder.

Prior to the formal confirmation of the shortlisted bidders and the commencement of the dialogue stage a further Key Stage Review will be carried out by SFT. This will result in a report to the Project Sponsor.

The three shortlisted bidders will then be issued with an Invitation to Participate in Dialogue (ITPD) and will enter the competitive dialogue stage of procurement.

#### Key points for NHSL decision/confirmation

- What does the board regard as crucial to the success of the project and that therefore must be assessed as part of the PQQ
- Identify and commit the resource required for PQQ evaluation
- What scorings and weightings are to be applied to the various sections of the PQQ and how
  is financial standing to be assessed and the outcome blended with other assessed areas to
  produce an overall score
- Gain Project Board approval, well in advance of completing the PQQ evaluation, that three and only three bidders will be taken forward.

#### **Bidders Day**

A well structured Bidders Day is an opportunity for the project to be marked to potential bidders. The Bidders Day will be referred to in the OJEU announcement and in the Memorandum of Information. This will be held during the period for PQQ evaluation and return.

The Chief Executive and Chair should be asked to be present at the Bidders Day and to give presentations in which they will confirm the board's commitment to the project and to the NPD model. It is important that other board senior executives who have responsibility for the project are also present to meet and have discussion with potential bidders. SFT have advised that they will be present and will be happy to give a detailed presentation on the NPD model. As well as a general opportunity to ask questions, potential bidders will expect to engage on an individual basis with senior board executives and Project Team members and advisers. The day must be timetabled in such a way that this type of engagement is possible and encouraged.

#### Key points for NHSL decision/confirmation

- Identify likely date and venue for Bidders Day and ensure key board representatives have in their diaries [ Must include Chair and Chief Executive]
- Decide who has responsibility for organising Bidders Day [this is best done by a Project Team member]

#### Invitation to Participate in Dialogue (ITPD)

The ITPD will be issued to the three bidders that pre-qualify following the PQQ stage. It must therefore be available for issue immediately approval is given to board's selection of the three bidders to go forward. The PQQ is a detailed document that sets out the board's requirements for each aspect of the project scope as well as how bids will be evaluated. It also sets out how the Competitive Dialogue stage will be conducted. The fact of making these details available will help in building the confidence of potential bidders. Further confidence will be added if these details are also set out in summary in the MoI and form part of the Project Director's presentation at the Bidders Day.

The programme of meetings should be set out in the ITPD, although the board will retain the right to vary these and to accommodate bidder's requests for additional meetings.

#### Key points for NHSL decision/confirmation

 Agree content of ITPD with advisers, responsibility for producing each section and timescale for production

#### Competitive Dialogue

The competitive dialogue stage is the longest and arguably most important stage of the procurement. As such it is vitally important that it is carefully structured to ensure that each bidder is treated equally. Bidders must have equal access to those who will ultimately score the final bids.

It is crucially important that the Competitive Dialogue negotiations are led by the board's Project Team and that they are seen to be led in this way by bidders. Advisers will have a significant role to play in the Competitive Dialogue process but their role must never become so prominent that they are effectively running the project. Bidders, quite rightly, expect to negotiate with the procuring authority, and do not expect advisers to lead the negotiations.

The dialogue stage will be structured as a number of bilateral meetings with each bidder. NHSL need to ensure that there is sufficient structure to the dialogue stage to allow the relevant individuals from each bidder's team, which will include their advisers, and NHSL to meet to discuss all relevant technical, financial, legal and other issues. This will take place over a number of rounds of dialogue spread over several months with two or three weeks between each round. Having meetings any closer together results in there being insufficient time between meetings for points to be actioned. Meetings on each topic (technical, financial and legal etc.) will generally take place concurrently during each round and this means that multiple meeting spaces are required within a single venue.

The dialogue stage should begin with an initial meeting where the Project Team will explain the project's requirements and engage in discussion around these with each bidder. Successive rounds of dialogue will allow bidders to discuss and clarify the project requirements and explain their emerging proposals.

The board will need to decide whether to take all three bidders through to the final bid stage or whether to down select one bidder i.e. only take two bidders to the final stage. There are

advantages and disadvantages of each approach and these can be set out if required for Project Board decision. The intention is to take all three bidders through to the final bid stage although the right should be reserved in the ITPD document to down select to two bidders.

The board will state in the ITPD that it intends to take three bidders to the final stage. The board should also confirm its position on this issue in the Memorandum of Information and at the Bidders Day. The board should state that it intends to take all three bidders to the final stages but reserve the right to down select. Any decision to down select must be taken against clear criteria and the Project Team must be able to provide feedback and to justify the board's decision to the bidder down selected.

Once the Project Director is happy that there is sufficient understanding of bidders proposals and that all question from bidders have been answered and that all commercial, technical and financial points have been resolved, he will give notice of the date when the dialogue stage will close. This provides a final opportunity for bidders to ask questions of the Project Team. It is important to recognise that following the close of dialogue there should be no further negotiations with bidders on technical, financial or commercial issues. Therefore the board can only declare the competitive dialogue stage complete when it is satisfied that all substantive matters have been resolved to its satisfaction.

A further Key Stage review will be carried out when the board indicate that they are ready to close the dialogue, but before this is confirmed to bidders.

#### Key points for NHSL decision/Confirmation

- Confirm that all three bidders will be taken to final bid stage but that the right will be reserved in the ITPD to down select.
- Identify Project Team and adviser resource necessary to engage with bidders during competitive dialogue and programme into a Resource Plan
- Identify where the competitive dialogue meetings will be held and ensure sufficient meeting spaces available [if NHSL cannot provide suitable accommodation then advisers premises could be used]
- Identify clinician and wider stakeholder engagement with bidders [using adviser's premises will be a problem here]

#### Final Bids

When the dialogue stage is closed, bidders will receive the Invitation to Submit Final Bids (ITSFB). This document will set out the required format of bids and the timescale for their submission. NHSL need to consider quite early in the procurement what detail they will expect from bidders in their final bid submissions. The breadth and depth of final bid content must be sufficient to give NHSL comfort that they have been able to evaluate everything of importance to the project and that they know what bidders are committed to deliver contractually. Crucially the ITSFB will also set out the criteria and weightings that NHSL will use to evaluate final bids.

NHSL must identify well in advance the resources that they will use to evaluate the bids and how this crucial stage will be facilitated from their own resources and those of advisers. The right people will have to have the bid evaluation sessions timetabled well in advance. Again, these resources should be identified in a Resource Plan. The role in the evaluation taken by clinical teams and wider stakeholders will also have to be set out.

There will probably be a number of sessions during the evaluation period where bidders will meet with the evaluation team to answer questions on their bids. It is likely that a formal presentation will be required from each bidder. NHSL will have to decide who will be invited to be in the audience for each presentation and therefore to be given an opportunity to ask questions. Depending on numbers, it is likely that all those undertaking the formal evaluation of bids should be given an opportunity to be present.

NHSL will need to consider how to facilitate the involvement of City of Edinburgh Council Planning Department in the Competitive Dialogue stage. The Project Team will wish to be made aware of their views on each design and whether any is likely to experience difficulty in obtaining full planning approval.

Ultimately, following a full and complete evaluation, the bidder judged to have submitted the most economically advantageous bid will be identified as the Preferred Bidder. This bidder will be invited to sign a Preferred Bidder letter setting out the conditions of their appointment.

A key stage review will be carried out by SFT prior to the formal appointment of a Preferred Bidder.

Unsuccessful bidders are entitled to feedback on the reasons why they were unsuccessful and it is crucial that NHSL can clearly explain the reasons, which must be fully compliant with the evaluation criteria previously set out, why their bids were not successful.

#### Key points for NHSL decision/confirmation

- What content will bidders be asked to submit as part of their final bid submissions
- What evaluation criteria and weightings are to be used to identify a preferred bidder
- What project team resource and adviser resource will be required to review and assess bids, what involvement will clinicians and wider stakeholders have in this process
- Confirmation whether the Preferred Bidder appointment can be approved by the F&PR committee or will require the full board approval

#### **Financial Close**

Following Preferred Bidder appointment, the Project Team will complete the Project Agreement with the Preferred Bidder. The standard NPD suite of documents has been prepared by SFT and these will be used for the project. The Project Agreement is included as one of the suite of documents but the Project Team and the board's advisers will need to prepare the Payment Mechanism along with some of the schedules to the Project Agreement. Any derrogations from the NPD standard contract, which SFT have indicated they expect to be few in number, will require the approval of SFT.

It is extremely important that this, financial close, stage of the procurement is not allowed to be used by the Preferred Bidder to reopen commercial points agreed before the close of dialogue or to introduce new commercial points. This danger emphasises the importance to the board of not closing the dialogue stage before all commercial issues are agreed.

The Preferred Bidder will have responsibility for applying for and obtaining detailed planning approval.

The Project Team will be required to prepare and submit a Full Business Case to SGHD and to have this approved before signing the Project Agreement with the Preferred Bidder.

A Key Stage review on the Full Business Case will be carried out prior to the project agreement being signed with the Preferred Bidder.

Once the Project Agreement has been signed, and with NHSL taking the risk of judicial review, the way is clear for the Preferred Bidder to commence work on the project.

Appendix A – Procurement Documents and responsibility for Preparation

Appendix B – Memorandum of Information Contents

<u>Appendix A – Procurement Documents (Draft)</u>

<u>Document</u>	Prepared By	Reviewed/Approved	Required Date
		<u>By</u>	
OJEU Notice	Technical advisers [DL or Motts]	NHSL-Approved by Project Board	Issued Immediately following SGHD approval of OBC and successful outcome to KSR.
Memorandum of	Advisers + NHSL	NHSL - Approved by	Date OJEU Notice
Information		Project Board	published
Pre-Qualification	Advisers [led by DL or	NHSL - Approved by	Date OJEU Notice
Questionnaire and evaluation criteria	Motts] + NHSL	Project Board	published
ITPD and evaluation criteria	Advisers [led by DL or Motts] + NHSL	NHSL – Approved by Project Board	Date PQQ shortlist announced (following KSR)
Interim submission	Advisers [led by DL or	NHSL – Approved by	Mid/Late Competitive
requirements. (Could be required for down selection or bidder progress review)	Motts] + NHSL	Project Board	Dialogue period
ITSFB and evaluation	Advisers [led by DL or	NHSL – Approved by	Date Competitive
criteria	Motts] + NHSL	Project Board	Dialogue stage closed
NPD Standard Contract	SFT	NHSL Legal advisers	Draft already prepared and with ministers for decision on small number of points
Payment Mechanism	NHSL technical,	NHSL - Approved by	ITPD stage
and some Standard Contract Schedules	financial and legal advisers	Project Board	commencement
Preferred Bidder Letter	NHSL Legal advisers	other advisers & NHSL	Conclusion of final bid
		– Approved by F&PR	evaluation & PB
		committee	appointment and KSR
Full Business Case	NHSL and advisers	NHSL – Approved by	Conclusion of financial
		NHSL Board	close negotiations
Project Agreement	Legal advisers	NHSL – Approved by	Conclusion of financial
		NHSL Board	close negotiations

SFT will provide comment and challenge on all of the above documents and, where appropriate, assistance in their preparation

The scheme of delegation prepared by NHSL for the project must make it clear what delegated authority the Board is giving the Project Owner/Project Sponsor/ Project Director/F&PR committee and Project Board to approve each of the procurement documents.

Appendix B – MOI Contents
Section Headings:
Forward (by NHSL Chair)
Introduction (by NHSL Chief Executive)
Background
RHSC Service Profile
DCN Service Profile
NHS Scotland Context
NHS Lothian Context
Project Scope (include reference to relevant FF&E, ICT, Enabling Works etc.)
Equipment Procurement
Design (extent of design work undertaken by NHSL and "non-negotiables"
Option appraisal and selected site
Consort Interface
Planning considerations
Opportunities for the Private Sector
Staff Transfers
Affordability incl. initial capital requirement
Accounting Treatment
Procurement Process
Project Management Arrangements
Bidders Day
Obtaining PQQ documents
Completing and returning PQQ documents
Disclaimer

# RHSC and DCN Re-provision Project Steering Board 14 December 2012

#### PROJECT GOVERNANCE ARRANGEMENTS

#### **Purpose of the Report**

The purpose of this report is to outline the project governance arrangements agreed to date for the re-provision of RHSC and DCN at Little France.

#### Recommendations

The Steering Board is recommended to:

- Note the governance arrangements agreed up to appointment of Preferred Bidder
- Advise on the development of any specific project governance arrangements for the Construction and Commissioning phases of the project

#### **Governance Overview**

- 1. The terminology used to describe project governance arrangements is as defined by the Scottish Capital Investment Manual (SCIM) Programme and Project Organisation Guide.
- 2. The Investment Decision-Maker is Lothian NHS Board, which is ultimately accountable for the Project.
- 3. The Board's Finance and Resources Committee (F&RC) has established a Project Steering Board, chaired by the Project Owner, NHS Lothian's Director of Finance.
- 4. The F&RC routinely receives minutes of the Project Steering Board. The Project Owner shall provide assurance to the F&RC on key aspects of project governance & internal control, and progress reports on the delivery of key project milestones.
- 5. The Project Owner shall alert the F&RC in the event of any trend towards cost escalation or delay, or any radical changes to the objectives of the Project. The Project Owner shall make recommendations to the F&RC on action to take in these circumstances.

- 6. The Project Owner has the executive responsibility for decision-making relating to the project. All decisions must be consistent with Board strategies, policies and procedures and delegated budgets or in line with with any derogations.
- 7. The Project Director has responsibility for delivering the project within the governance parameters set out.
- 8. Project Steering Board remit:
  - To assist the Project Owner and Project Director in the decisionmaking process for issues relating to the project
  - To support the Project Owner and Project Director in preparing submissions to the F&RC, to satisfy that Committee's assurance needs on governance and internal control and monitoring of key performance milestones
  - To serve as the Capital Management Group, with delegated authority to approve capital enabling works for the Project up to £250k, and will be the first place to review schemes higher than £250k
  - To be the arbiter of matters arising from the implementation of the Project Design and the Strategic Delivery Programme
- 9. Project Steering Board Membership
  - Project Owner (chair)
  - Project Director
  - Medical Director
  - Non-executive member(s) of Lothian NHS Board
  - A representative from the service
  - Project Clinical Director
  - Director of Capital Planning and Projects
  - Associate Director of Finance
  - Project Operational Lead
  - Communications Manager
  - Communications Manager
  - A representative from the Lothian Partnership Forum
  - A representative from the South-East & Tayside Regional Planning Group (SEAT)
  - A representative from the Scottish Government
  - A representative from the Scottish Futures Trust
- 10. The Project Owner, as chair of the Steering Board, shall decide whether a meeting should proceed in the event of absence of any members. The Project Owner may designate a member to chair a Project Steering Board meeting in their absence.

- 11. However if the Project Steering Board is considering any business in its capacity as a Capital Management Group then the quorum is the Project Owner plus one member of Lothian NHS Board, or if the Project Owner is not present, two members of Lothian NHS Board.
- 12. The Project Director is supported by a project team comprising clinical experts and experienced NHS managers from capital planning, service management, finance and communications. Staff representation is fully integrated into the project with a full-time Partnership member of the team.
- 13. The Board's team are supplemented by specialist expertise from external financial, legal, and technical advisers.
- 14. A Project Management Executive supports the Project Director in the day to day running of the project and reporting on progress to the Project Steering Board.

#### **Governance Specific to the Procurement Phase**

- 15. The Project Steering Board has delegated authority from the F&RC to release the OJEU notice for the contract.
- 16. The Project Steering Board will, following evaluation of the prequalification submissions, make recommendation to the F&RC as to the shortlisted Candidates shortlisted for Competitive Dialogue. NHS Lothian Board has delegated the responsibility for approving up to three Candidates for Competitive Dialogue to the F&RC.
- 17. The Project Steering Board will release the ITPD documentation and evaluation criteria to Bidders on approval of the shortlist by F&RC.
- 18. At the conclusion of evaluation of Final Tenders, the Project Steering Board will recommend a preferred bidder to the F&RC. The decision to appoint a Preferred Bidder lies ultimately with NHS Lothian Board.

#### **ACTION NOTES**

Commercial in Confidence

- not disclosable under the Freedom of Information (Scotland) Act 2002

Meeting Title: RHSC + DCN - Little France - PROJECT STEERING BOARD

**Date/Time:** Friday 14<sup>th</sup> December 13:00 – 15:00

**Location:** Project Office, 56 Canaan Lane

Attendees: Susan Goldsmith Exc Project Sponsor/Director of Finance – NHSL (Chair)

Peter Reekie Director Finance + Structures – SFT
George Walker Non Executive Director – NHSL
Janice MacKenzie Project Clinical Director – NHSL

Jackie Sansbury Operations - NHSL

Chris Bowring Director of Finance – NHS Fife

Iain Graham Director of Capital Planning and Projects – NHSL

Carol Potter Associate Director Finance - NHSL

Brian Currie Project Director – NHSL Susan Lloyd Partnership Lead – NHSL

Carol Harris Communications Manager - NHSL

Apologies: Mike Baxter Deputy Director (Capital + Facilities) - SGHD

Fiona Mitchell Dir. Ops – NHSL - Women's, Children's + Neurosciences

Robert Wilson Non Executive Director – NHSL

David Farquharson Medical Director – NHSL

Stuart Wilson Director of Communications – NHSL

# NOTES *Item*

1.	Previous Notes + Matters Arising	Lead
	SL asked that item 2 "Dashboard" section "IT Project Manager" should be altered to recognise Partnership's view that the manager should not be restricted to RHSC + DCN Project only and that a role at the Royal Edinburgh Hospital should be accommodated.	вс
2.	Dashboard + Risk Register	
	SG, on behalf of the Project Steering Board, acknowledged the contributions by all to a very successful Bidder's Day held on the previous day.	
	BC also confirmed that a Funding Letter from Scottish Government had been received and that the Pre OJEU KSR had been approved confirming the project was ready to progress to the next stage (KSR – Pre ITPD). OJEU Notice was publishe don 5 <sup>th</sup> December, 2012.	
	SA Enabling was signed by both Consort Healthcare and NHSL on 12 <sup>th</sup> December, 2012.	
	The remaining approval by the City of Edinburgh Council's Flood Prevention Officer to the Flood Management Proposals does seem to be nearing a satisfactory conclusion with a letter of confirmation from Development Management expected w/c 17 <sup>th</sup> December. This will allow planning applications to be made for both on site and offsite flood prevention enhancement works.	
	PR asked for confirmation that the Project Steering Board does not hold any Health + Safety responsibility for Enabling Works on the RIE Campus. SG replied that this was the case.	

#### **ACTION NOTES**

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#### Item

Item		
	GW asked that more reporting was required going forward on Services Redesign and Workforce Planning. These activities to be also added to Strategic Delivery Programme. SL commented that there does appear to be on occasions a splintering of responsibilities and lack of co ordination of "silo's" of workforce. SL would like clarification of who is leading this from within NHSL? SG replied that a task force was being set up to manage this process going forward with a clear remit and deliverables to a time frame.	вс
	GW asked if there were any implications for St Johns? JMcK replied that due consideration and consultation had taken place and would continue throughout the development of this work stream.	
	SL asked whether Operational Personnel within the RIE were comfortable with the Project Team undertaking "capacity" projects within the RIE? BC asked whether Partnership themselves were aware of any concerns in this regard? SL replied that they were.	
	SL expressed concern that these "capacity" projects could be seen as project creep. SG replied that as directed by the CEO the project should take an active role in co ordinating and managing the programme of works where appropriate within the RIE.	
	BC stated that a full Risk Workshop was planned in January and that the outcome of this would be conveyed to the Project Steering Board.	ВС
	It was agreed that the "Programme Dial" should now be reset to Green to reflect the approved strategic programme now in place.	
3.	Papers	
	Procurement Programme	
	V6 was tabled and it was agreed that the "Programme Dial" should now be reset to Green to reflect the approved strategic programme now in place.	ВС
	PR asked that any opportunity to accelerate the evaluation of PQQ's be taken particularly if a relatively small amount of PQQ's are returned.	
	Communications Plan	
	CH presented the main issues from the tabled Comms Plan.	
	SG asked what are the current concerns of Service Users? J McK replied that current theme was that all the previous work and input by them could be lost.	
	CB commented that it was essential that SAS were engaged early. CH replied that SAS sit on Stakeholder Board and are heavily involved with all enabling works at the RIE.	
	PR offered the services of SFT to present to stakeholder groups the NPD procurement process and in particular explain the NPD impact on budgets. CH confirmed that this offer would be relayed to the various groups.	СН

#### **ACTION NOTES**

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#### Item

Item		
	SL asked that RIE staff be added to Comms Plan.	СН
	SG enquired as to timeline to move cars of Car Park B? JKS responded confirming that a paper for Partnership Forum is in preparation explaining phasing of car parking.	
	GW noted that there is no mention of Media Management and in particular a web presence and rolling programme of key messages. CH described the Web Micro Site now in operation and link to main webpage. The merit of a key message at strategic times was discussed and all agreed should be adopted. A regular Newsletter was also seen as useful.	СН
	PR asked if Twitter Feeds were being considered? CH replied that they were already in place.	
	IG commented on the demands on resources through responding to FOI's and that the following need careful management:	СН
	Images used by Bidders	
	Taxis and Buses	
	Bio Quarter Signage in RIE Campus	
	District Heating	
	Project Steering Board approved that recommendation tabled that due to the timeline for this District Heating Scheme, the project is unable to participate in it and that no change is necessary to the existing reference design and compulsory requirements.	
	IG was asked to covey this to Scottish Enterprise.	IG
	SFT Pre OJEU KSR Recommendations	
	Project Steering Board noted the recommendations made by SFT in the document and the progress to date as reflected in NHSL notes.	
	Energy Consumption Target	
	BC tabled a short paper on the project's current position in relation to an energy target and the prevailing NHSL Facilities differing view.	
	The Project Steering Board unanimously agreed that no additional capital expenditure to assist with a more ambitious target (through the introduction of further energy saving measures) should be funded within the capped £137m budget. SG tasked IG and BC with appropriate members of the project team along with NHSL Facilities to prepare meaningful financial forecasts in Capex and Opex terms for a reduction in Energy Consumption Target from 50 GJ/100m3 to 44 GJ/100m3 and to advise if it can be practically achieved given the brief and site constraints.	Noted

Noted

### Re-provision of RHSC & DCN at Little France

#### **ACTION NOTES**

**Item** 

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	These are to be tabled at the next Project Steering Board.	
	These are to be tabled at the flext i foject Steering Board.	IG/BC
	BC to also discuss with advisers the evaluation process adjustment that may be needed to best evaluate proposals possibly invited from bidders during dialogue to better current stated target. This would entail NHSL being clear on operating regime which in turn drives the energy model.	вс
	Project Governance	
	Project Governance Arrangements tabled were noted with amendments:	
	Governance procedures during construction to be reviewed further.	
	CB suggested £250 authority limit may prove impractical in practice.	
	Only one Comms Manager req to be present (Typo)	
	Scottish Government are observers only.	
	SL is nominated through not a representative of Lothian Partnership Forum and is part time.	
	PR advised that procuring body will have no ability to influence the decision from the evaluation process	BC
4.	Financial Update	
	CP tabled an update paper and SG noted that this provides a good level of transparency across all aspects of the Project Financial positions.	
	In response to a question fro JKS Cp advised that all non project costs would be	

I	6.	DATE & TIME OF NEXT MEETING		l
		Friday 25 <sup>th</sup> January 2013 - 13:00 – 15:00, Minns Room, 56 Canaan Lane	All	

Meeting was asked to note that for all future meetings, Carol Harris, Communications Manager, will represent NHSL Communications in place of Stuart

reported through the routine Capital Programme.

5.

AOB

Wilson.

#### **ACTION NOTES**

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Meeting Title: RHSC + DCN - Little France - PROJECT STEERING BOARD

**Date/Time:** Friday 25<sup>th</sup> January 13:00 – 15:00

**Location:** Project Office, 56 Canaan Lane

Attendees: Susan Goldsmith Exc Project Sponsor/Director of Finance – NHSL (Chair)

Mike Baxter Deputy Director (Capital + Facilities) - SGHD

Peter Reekie Director Finance + Structures – SFT
Robert Wilson Non Executive Director – NHSL
Janice MacKenzie Project Clinical Director – NHSL

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Fiona Mitchell Dir. Ops – NHSL - Women's, Children's + Neurosciences

David Farquharson Medical Director – NHSL

#### **NOTES**

**Apologies:** 

Item

1.	Previous Notes + Matters Arising	Lead
	Previous notes taken as read.	
2.	Dashboard + Risk Register	
	BC presented key points from the executive summary:	
	PQQ Returns – three received PR asked that where possible the programme to recommend bidders is accelerated given three PQQ's obtained. BC replied that due and proper process is upper most in the evaluation team's mind and that a detailed programme of evaluation activities has been agreed which may prove difficult to re organise at short notice. However, the intention is to make final recommendation to next P St Bd on the 22 <sup>nd</sup> February, some 7 business days ahead of current programme. A subsequent extraordinary F+R Meeting may be required to be called to authorise progression to dialogue – SG to advise. 11 <sup>th</sup> March commencement of dialogue remains target.	SG
	TAWO's 156 – 161 – commenced 21 <sup>st</sup> January, 2013  MB asked if their was any synergy between these works and current CEC Flood Works downstream and whether actual delivery could be undertaken by CEC with funding from NHSL/SG? BC replied that the CEC Flood Works in question were effectively complete (although 6 months behind schedule) and were geographically quite distinct from our required Off Site Flood Defence Works. It was agreed that the current agreed procurement through a competitively tendered route via NHS portal should continue.	
	MB repeated previous requests by members of the P St Bd that a comprehensive strategic programme is tabled asap to identify critical path and dependencies between these works and their completion to allow vacant possession of the site by Project Co following Financial Close on the date currently programmed.	

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#### Item

Item		
	BC replied that firm dates were not yet available from Consort and would be unlikely to be available until such time as Consort had fully designed and programmed all variations issued to them by NHSL. Consort, although repeatedly asked, are unable at this moment in time to provide this information. Design programmes are expected within the next 3 -4 weeks.	ВС
	<b>Fundraising Strategy – Ongoing</b> BC highlighted the need to identify elements of the facility which are not included in the base build (capped £137m) which could be funded by 3 <sup>rd</sup> Parties. Project team to discuss with Director of Operations.	вс
	Scottish Futures Trust – Role? There was some discussion around accountabilities of the NHS Board and SFT in terms of making decision about the project. MB confirmed that SFT's role was one of procurement and governance and not technical or clinical and PR added that the legal liability always rests with the procuring body (NHSL) as any contract is between that party and Project Co. MB reminded all present that SFT are a wholly owned Scottish Government body providing independent assurance on behalf of Scottish Government. PR commented that the Government Minister has the final decision.	
	Risk Register BC advised that following a recent project risk review a new risk register is under development and would be available for the next P St Bd.	
	RW asked if this project was one of the Board's key risks? SG confirmed that it is and particularly so given the scale and potential impact of all the RIE campus development works (enabling, clinical enabling and capacity works) now envisaged to service continuity.	
3.	Papers	
	Programme v6 9.1  A revised version of the Strategic Development programme was tabled which illustrates adjustment to the activities during dialogue following further consideration by the project team. Note – there are no changes to any key dates or milestones.	
	SFT recently requested that another KSR be introduced at Pre Appointment of Preferred Bidder stage. After some discussion it was agreed that further dialogue with SFT was required to understand the need for this.	вс
	Service Redesign TOR  JKS presented the draft terms of reference for the Service Redesign Group and advised that further papers would be forthcoming on overall strategic redesign plan and be processed for gaining Board approval for the same. The Project Steering Board noted it's contents.	
	Both JKS and BC confirmed that the redesign plan would support delivery of previous assumptions and prepare the services for the move.	
	SL highlighted the need to ensure the RHSC and DCN work streams joined together at the appropriate time.  JKS confirmed the work in RIE would be carried out through the clinical work groups	

#### Re-provision of RHSC & DCN at Little France

#### **ACTION NOTES**

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#### **Item**

already in existence.

#### **RIE Campus Development Update**

JKS explained that a new title had been agreed upon to describe all activities or development work currently envisaged within the RIE Campus be they Enabling, Clinical Enabling, Capacity or general Facilities works – "RIE Campus Development".

A RIE Campus Working Group has also been set up, chaired by the Director of Facilities, and SG confirmed that the project would be dealing with RIE "Capacity" projects.

MB re iterated the need for timelines for all these activities, visibility of all associated works on other sites and to note that funding beyond 2014/15 was not in the funding letter at OBC Stage.

RW asked for details of the composition of the RIE Campus Working Group? JKS to bring terms of reference to next meeting.

RW suggested that this Working Group report to the Project Steering Board. SG thought not given that it has primarily a Health + Safety responsibility and confirmed that is through a distinct other NHSL management line.

SG advised all present that Consort have recently proposed the employment of a "Programme Manager" to manage all aspects of the enabling works scheduled for the coming months and that NHSL are currently seeking the secondment of a "Variations Manager" to match this. A Site Co ordinator/Logistics/H+S Manager, possibly as a joint recruit, also requires to be sourced.

The Project Steering Board noted the contents of the paper tabled.

#### **Paymech Calibration**

BC outlined the principles behind the Payment Mechanism as agreed with SFT following a series of meetings over the past months.

PR wondered what the market acceptance of the gearing proposed would be and asked for re assurance that evidence from very recent "deals" was used to inform the level proposed. BC replied that benchmarking had been part of the exercise in arriving at the gearing ratio employed and MB offered to speak to Brian Saunders at Liverpool who have just recently concluded a large PFI deal.

RW commented that it was always a difficult balance to be struck between what the market would bear and public sector requirements but that the Project Steering Board should take the basket of advice offered by the Board's advisers.

All agreed the contents of the paper tabled.

PR took the opportunity to thank all team members who have been involved on this aspect of the project on behalf of all Acute Healthcare NPD Projects coming through the pipeline. BC will pass on to project team.

In future all documents to be headed "Commercial in confidence ...."

#### Communications - Key Issues

CH tabled a paper on key messages which may be of general interest and use. PR asked that all Enabling Works are added to this. CH to action

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JKS

BC

BC

CH

# Re-provision of RHSC & DCN at Little France

#### **ACTION NOTES**

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ltem		
	SG asked how these messages were being communicated to staff at the RIE. CH replied that the internet and intranet were being employed but JKS added that this will always be a challenge and that more needs to be done.	СН
	RW asked how the number of beds had been arrived at (233)? JKS responded that extensive modelling had been carried out and is repeated annually based on a number of factors including demographic growth, benchmarking and the new models of care.	
4.	Financial Update	
	SG presented a project financial update. RW asked why the variance on Clinical Enabling Works was so high? JKS explained that the current forecast carries a contingency allowance covering the possible displacement of accommodation into new build premises although the intention is to re house in existing premises. This was not allowed for at OBC stage.	
	Arithmetic to be checked on Table 1	СР
	SG advised that the Board were looking at substitutions following recent discussions with SGHD in relation to forecast under spend to year end on enabling works.	СР
	SG asked for comments on how fee expenditure is assessed as value for money? PR suggested comparing advisers fees to date against fees bid on appointment. RW agreed that it is essential that actual v forecast is reported and reasons for any variance advised.	СР
5.	AOB	
6.	DATE & TIME OF NEXT MEETING	
	Friday 22 <sup>nd</sup> February 2013 - 13:00 – 15:00, MacKinlay Room, 56 Canaan Lane	AII
	I	







# **NHS Lothian**

Royal Hospital for Sick Children
& Department of Clinical Neurosciences
Reference Design Stage
BREEAM 2008/2011 Comparison and Project
Implications

**Sept 2011** 

#### **Hulley & Kirkwood Consulting Engineers Ltd**

The Stack

**Ground Floor** 

Papermill Wynd

McDonald Road

Edinburgh

EH7 4QL

(t): +44(0) 131 558 4888 (f): +44(0) 131 558 4889

(e): hk.edinburgh@hulley.co.uk

(w): www.hulley.co.uk

.....Making Buildings Work

Prepared By: Jonathan McMillan Authorised By: Michael O'Donnell

Revision: A

Date: Sept 2011

# NHS Lothian Royal Hospital for Sick Children & Department of Clinical Neurosciences Reference Design Stage BREEAM 2008/2011 Comparison and Project Implications

# **Sept 2011**

REV	DESCRIPTION	PREPARED BY	DATE
Issue No. 1	First Issue	Jonathan McMillan	15-7-2011
Issue No. 2, Rev A	Breeam 2011 Implications to RHSC-DCN text expanded to further clarify for NHSL	Michael O'Donnell	02-4-2011

July 2011

# NHS Lothian Royal Hospital for Sick Children & Department of Clinical Neurosciences Reference Design Stage BREEAM 2008/2011Comparison and Project Implications

#### Contents;

#### 1.0 Introduction

- 1.1 Report Scope
- 1.2 Executive Summary
- 1.3 Risk Areas Associated with Minimum Credit Standards
- 1.4 Concluding Statement

#### 2.0 Changes within BREEAM 2011

- 2.1 Management
- 2.1 Health & Wellbeing
- 2.3 Energy
- 2.4 Transport
- 2.5 Water
- 2.6 Materials
- 2.7 Waste
- 2.8 Land Use & Ecology
- 2.9 Pollution
- 2.10 Innovation

#### 1.0 Introduction:

This Report has been prepared by Jonathan McMillan for Hulley ECO, a sustainable building design and building simulation division within Hulley & Kirkwood Ltd. Jonathan has the following qualifications relative to sustainable building design and building simulation;

- MEng (Hons). in Mechanical Engineering The University of Edinburgh
- BRE Approved Certifier of Design for Section 6 Compliance
- Integrated Environmental Solutions (IES) accreditation covering Section 6 Compliance for building types 3, 4 & 5 and for preparation of Energy Performance Certificates.
- BRE ISBEM software qualification
- CIBSE Low Carbon Consultant Simulation Specialist
- CIBSE Low Carbon Consultant Building Design Specialist
- Licensed BREEAM Assessor Health Care

#### 1.1 Report Scope

"BREEAM Healthcare 2008" was first issued on 24<sup>th</sup> June 2008. As of 1<sup>st</sup> July 2008 all health authorities in the UK required that all healthcare buildings seeking Outline of Business Case (OBC) approval commit to achieving an Excellent rating.

The original Royal Hospital for Sick Children (RHSC) only scheme was registered under the "BREEAM Healthcare 2008" assessment method by Hulley & Kirkwood during February of 2010. A pre-assessment checklist was issued and the design team set in motion a plan of action to achieve a "BREEAM Healthcare 2008" Excellent rating under this scheme. It was confirmed through the pre assessment checklist estimator and subsequent design development during 2010 that an Excellent rating was achievable.

Following the change of procurement route towards the end of 2010 (HFS Framework to SFT route) and the alteration to the project scope to include the Department of Clinical Neurosciences (DCN), the RHSC-DCN Reference Design brief was formalised by NHSL with the Reference Design period commencing from the end of April 2011. As the project was already registered with the BRE, Hulley & Kirkwood were able to retain the registration number for project, and as a result, are currently able to pre-assess the combined RHSC/DCN building under the "BREEAM Healthcare 2008" assessment method.

During May and June of 2011, Hulley & Kirkwood prepared the pre-assessment for the new scheme and on the 8<sup>th</sup> July 2011 circulated a Reference Design stage "BREEAM Healthcare 2008" pre-assessment check list for the current RHSC/DCN building confirming again that an Excellent rating is achievable under this assessment criteria. The actions required to achieve a formal "BREEAM Healthcare 2008" Excellent rating were also confirmed. This is one of the Reference Design agreed deliverables already carried out in accordance with the agreed Reference Design program.

Following the "BREEAM 2011 New Construction" scheme going live on 1st July 2011, Hulley & Kirkwood have been requested by NHSL to prepare a short report highlighting the key differences between the "BREEAM Healthcare 2008" and new "BREEAM 2011 New Construction" assessment criteria and how this would affect the RHSC-DCN scoring estimate and predicted rating.

The intention of this report is to highlight the differences between the "BREEAM Healthcare 2008" scheme and its replacement, the new "BREEAM 2011 New Construction" scheme, and to identify the key risk areas which are highly likely to affect NHSL's aspirations of achieving an Excellent rating should the 2011 assessment criteria be applied instead of the 2008 assessment criteria.

It should be noted that this document is not intended as an exhaustive list of every difference between the "BREEAM Healthcare 2008" and "BREEAM 2011 New Construction" assessment methods.

Following the completion of the Reference Design stage, the project could continue to be assessed under the "BREEAM Healthcare 2008" assessment method. However, if the project reference number is not transferred the project will have to be re-registered under the new "BREEAM 2011 New Construction" assessment method.

#### 1.2 Executive Summary

Hulley & Kirkwood have already prepared and circulated a reference design stage "BREEAM Healthcare 2008" pre-assessment check list for the current RHSC/DCN building which illustrates the actions required to achieve a BREEAM Excellent rating. This is one of the reference design agreed deliverables.

Credits within the checklist have been broken down into three categories

- **Best Value BREEAM credits** Credits which form the basis of best practice design and which benefit the overall design with limited additional cost
- Add-ons for excellent credits Technically challenging credits above best practice design which have implications on project cost, procurement strategy and site space requirements.
- Unlikely credits Credits which are deemed unobtainable / unlikely for the reasons detailed

It was determined that a BREEAM Excellent rating was achievable in principle with input from the Reference Stage design team and the subsequent successful bidder design team. It was determined that a maximum potential score of **79.53%** was achievable, with 56.17% being attributed to "Best Value BREEAM credits" and 23.16% being attributed to "Add-ons for BREEAM Excellent".

Subsequent to the issue of this checklist Hulley & Kirkwood have compared the 2008 and 2011 BREEAM assessment methods on a credit by credit basis and have compiled an equivalent scoring for the project under the 2011 assessment method. The results of this comparison can be seen in table 1.2 below. The comparison demonstrates that the maximum potential score under the 2011 assessment method is significantly lower than that under the 2008 assessment method. Results highlight that, if the project is to be assessed under the 2011 assessment method, there is a high probability that an Excellent rating is not likely to be achieved and that a high Very Good rating is more likely for an acute hospital building on this restricted site.

Credit Type	Description	BREEAM 2008 Score	BREEAM 2011 Score
Best Value BREEAM credits	Credits which form the basis of best practice design and which benefit the overall design with limited additional cost	56.17%	51.97%
Add-ons for excellent credits	Technically challenging credits above best practice design which have implications on project cost, procurement strategy and site space requirements	23.36%	17.74%
Unlikely credits	Credits which are deemed unobtainable / unlikely for the reasons detailed	20.47%	30.29%
Maximum Potential Score	Maximum Potential Score including Add-ons for Excellent	79.53%	69.71% (A drop of 9.82%)
	BREEAM Excellent Rating Achieved (70% Required)	Yes	No

Table 1.2.1 Comparison of Potential Scoring between BREEAM 2008 and 2011 Assessment Methods

#### 1.3 Risk areas associated with minimum credit standards

Having compiled a comparison of maximum potential scoring for the two assessment methods Hulley & Kirkwood have identified the following other specific high risk areas associated with achieving a BREEAM Excellent rating under the 2011 assessment method. In addition to the general more onerous scoring criteria overall, there are a number of "Minimum Standard" scoring requirements which must be achieved, without which Excellent will not be granted, even if the total scoring elsewhere passes the Excellent scoring threshold. These are:

#### § Ene 01: Reduction of CO2 emissions

The Building Regulations Scotland were revised during October 2010 with more onerous targets for carbon reduction in new buildings as confirmed in Section 6 of the regulations. This new Section 6 raised the pass threshold for all new buildings from -28% carbon reduction to -50% carbon reduction relative to the "Notional Building". In addition, the "Notional Building" in the 2010 Regulations became more efficient, meaning that the improvement relative to the previous 2007 version of the Building Regulations was in fact even greater.

In order to achieve a "BREEAM 2011 New Construction" Excellent rating a project must score at least six credits in the ENE01 section. In order to achieve six credits the building CO<sub>2</sub> emission rate must be reduced to a level representing a 25% improvement beyond the current 2010 Building Regulations, ie achieve a Building CO<sub>2</sub> emission rate (BER) which is 25% less than the Target CO<sub>2</sub> Emission Rate (TER). This reduction represents a total reduction in CO<sub>2</sub> emissions of 70% relative to the 2010 "Notional Building". This is clearly an extremely onerous target for a highly serviced Acute Hospital facility with departments which inherently attract high energy profiles.

We have assessed that currently, the Reference Design Envisaged Approach will provide a Building Regulations Section 6 2010 compliance route in terms of reduction of carbon emissions. Our RHSC-DCN Sustainability Options Executive Summary Report explains how we achieve this with Best Practice Energy Efficiency measures, Passive Energy Conservation measures, the extensive use of PV panels (800m2 surface area) and key to the strategy, a gas fired Combined Heat and Power Unit located within the Energy Centre. The report illustrates the relative benefit of each measure - it can be seen that the CHP has the largest impact in the reduction of carbon emissions as well as being able to reduce the cost of energy through the generation of electricity on site by means of gas supply, with engine heat recovered for use within the facilities heating system. The report also analyses alternative and additional Low or Zero Carbon Generating Technologies (LZCT) and explains why the use of these alternatives for this project on this site is not practical which in summary are:

 Ground Source Heat Pump – We estimate a ground area of around 4,800m2 with 250 off, up to 150m deep, closed loop bored pipe system would be required to generate around 1500kW of low temperature heat which could be used for AHU frost coil load. Tight site boundary constraints dictate that this option is not a practical proposition for this site.

- Biomass Boiler Plant We estimate an additional 150m2 internal Energy Centre plant space and 60 m2, 5m deep woodfuel bunker adjacent, with tipper truck delivery access required frequently would be necessary for a base heat load biomass boiler and large accumulator vessels. Likely planning objections arising from air quality issues ( woodfuel flue particulates ) and significantly increased flue chimney height along with the practical difficulties of safely managing woodfuel deliveries every other day via tipper trucks dictate that this option is not a practical proposition for this site.
- Solar Thermal Panels Solar hot water systems whilst a worthwhile idea generally, are not complimentary for operation alongside CHP plant since both technologies are attempting to tackle base heat load demand. In this regard, it is a one or other technology choice, and for an acute hospital, CHP plant can make a much more significant impact on carbon reduction.
- Wind Turbines Tight site boundary constraints dictate that this option is not a practical proposition for this site. Remote installation may be feasible at a scale which could make a significant reduction in carbon emissions for the RHSC-DCN only if carbon reduction benefits are transferable. The Scottish Government's current policy of grid electricity supply de-carbonisation through wind and wave renewable infrastructure projects in Scotland should eventually manifest in a formal reduction in the carbon emission factor associated with grid supplied electricity applied to Section 6 SBEM compliance calculations. In effect, this would automatically lead to a reduction in carbon emissions associated with the electrical consumption for the facility. The total electrical consumption is likely to represent around 40% of the total energy consumption and currently around 57% of the total carbon emissions, thus any decarbonisation of grid supplied electricity would be significant in the reduction of carbon emissions overall.

To recap, to achieve the BREEAM 2011 New Construction Ene 01 "Minimum Standard" for Excellent, we would need to improve our carbon reduction performance by a further 25% from where we currently stand. We are currently achieving -51.7% carbon relative to the 2010 "Notional Building" and would need to get to at least -70% less carbon. The only technology we feel can get some way towards this is by employing another CHP engine within the Energy Centre. Thus we would have a CHP engine operating to provide base load heat and power demand continuously for the whole year ( apart from maintenance downtime ) and a second engine operating approximately half of the year ( mid season and winter ) providing over base load heat and power demand. There is a practical limit on the selection of the engines against the buildings projected annual heat and power demand and transient profiles, and whilst we feel it is possible theoretically to get close to the target on current estimates, in reality we have reservations that the number can actually be achieved and would highlight the very high risk of it not being possible to achieve this credit without some other "off-site" Zero Carbon energy generating technology which could somehow be used to offset a further portion of the buildings carbon emissions.

By way of impact on special requirements, a second CHP would require the Energy Centre internal space to be increased from 1008m2 by +200m2 to 1208m2 and the external space to be increased by 80m2 to place heat rejection radiators for the second CHP. There would be no significant impact on the internal Hospital building plant space requirements with this proposal.

Table 1.2.2 below provides a comparison of the Notional, Target and Building Emission Rates in addition to the Minimum Standard emission rate required for BREEAM 2011 New Construction to achieve an Excellent rating.

2010 BER	2010 Section 6	RHSC/DCN	BREEAM 2011
	50% reduction in CO2 Emissions	Reference Design Stage	ENE 01. 6 Credits Requirement for Excellent Rating
	relative to 2010 Notional Building	Anticipated CO2 Emissions	25% further reduction in CO2 Emissions above TER Equivalent to a 70% reduction in NER
SBEM DSM Result 77.8kg.CO2/m2/annum	SBEM DSM Result 39.1kg.CO2/m2/annum	SBEM DSM Result 37.9kg.CO2/m2/annum	29.32kg.CO2/m2/annum
2010	2010	RHSC/DCN Reference Design	BREEAM 2011
Notional Building	Target Building	Stage	
CO <sub>2</sub> Emission Rate	CO <sub>2</sub> Emission Rate	CO <sub>2</sub> Emission Rate	CO <sub>2</sub> Emission Rate

Table 1.2.2 2010 CO2 Emission Rate Targets

#### § Wat 01: Water consumption

In order to achieve a BREEAM excellent rating a project must score at least one credit in the WAT01 section. In order to achieve this it must be demonstrated that the building can reduce its water consumption by approximately 12.5%. This will be difficult to achieve for a heavily serviced acute hospital building without additional water saving / recycling equipment. This may for instance require a substantial below ground rainwater harvesting scheme and filtration system, which would require significant extra site space for underground water storage and re-distribution of recovered water into the facility.

July 2011

#### 1.4 Concluding Remarks

- If assessed under the BREEAM 2011 New Construction scheme the project is highly like to not achieve the desired BREEAM Excellent rating for the reasons explained associated with "Minimum Standard" scoring credits.
- § A Like for Like comparison has highlighted that the current level of credit compliance anticipated for the *BREEAM 2008 Healthcare* assessment method will be insufficient to achieve the minimum percentage scoring level of 70% under the 2011 assessment method required to achieve BREEAM Excellent.
- There is very significant additional risk associated with the "Minimum Standard" credits required for *BREEAM 2011 New Construction* to achieve Excellent. The greatest of these is ENE01 Reduction of CO2 emissions. The required CO2 emission reduction associated with this credit represents a total reduction in CO<sub>2</sub> emissions of 70% relative to the 2010 Building Regulations Notional Building. It should be noted that this is an extremely onerous target and is likely to incur significant design and cost implications even if it were possible. Our current analysis indicates it is not a practical proposition due to the restricted nature of the site and site boundary constraints.

#### 2.0 Changes within BREEAM 2011

To maintain a flexible system *BREEAM 2011 New Construction* retains the balanced approach to the assessment and rating of building performance. This means that, to achieve a particular level of performance the majority of BREEAM credits can be traded, i.e. non-compliance in one area can be off-set through compliance in another to achieve the target BREEAM rating.

However, as per the *BREEAM Healthcare 2008* assessment method, to ensure that performance against fundamental environmental issues is not over-looked in pursuit of a particular rating, BREEAM 2011 improves Minimum Standards of performance in key areas e.g. energy, water, waste etc. It is important to bear in mind that these are minimum acceptable levels of performance and, in that respect they should not necessarily be viewed as levels that are representative of best practice for a BREEAM rating level.

To achieve a BREEAM Excellent rating the minimum overall percentage score of 70% must be achieved and the minimum standards, detailed in Table 2.1 below and overleaf must also be achieved.

Credit	Minimum Scoring required for Excellent	HK Comment
Man 01: Sustainable procurement	One credit	Equivalent to 2008 Assessment method. No additional risk
Man 02: Responsible construction practices	One credit	Equivalent to 2008 Assessment method. No additional risk
Man 04: Stakeholder participation	One credit	Building user information required  Equivalent to 2008 Assessment method.  No additional risk
Hea 01: Visual comfort	One credit	Equivalent to 2008 Assessment method. No additional risk
Hea 04: Water quality	One credit	Equivalent to 2008 Assessment method. No additional risk
Ene 01: Reduction of CO2 emissions	Six credits	BREEAM Excellent level (≥6 credits): Requires a CO2 parameter for the EPRNC calculation of 0.22. This is equivalent to a 25% improvement on the TER.  Significant Risk to RHSC DCN Excellent Rating.
Ene 02: Energy monitoring	One credit (First sub-metering credit)	Equivalent to 2008 Assessment method. No additional risk
Ene 04: Low or zero carbon technologies	One credit	Equivalent to 2008 Assessment method. No additional risk

Table 2.1 continued.....

Wat 01: Water consumption	One credit	The water consumption (litres/person/day) for the assessed building is compared against a notional baseline performance and a minimum 12.5% improvement is required  Significant Risk to RHSC DCN Excellent Rating.
Wat 02: Water monitoring	Criterion 1 only	Water meter required on incoming water main (regardless of water source)  Equivalent to 2008 Assessment method. No additional risk
Mat 03: Responsible Sourcing	Criterion 3 only	All timber must be sourced in accordance with the UK Government Timber Procurement Policy  Equivalent to 2008 Assessment method. No additional risk
Wst 03: Operational waste	One credit	Equivalent to 2008 Assessment method. No additional risk
LE 03: Mitigating ecological impact	One credit	Equivalent to 2008 Assessment method. No additional risk

**Table 2.1 Minimum Excellent Rating Requirements** 

The following section provide a brief summary of the changes to individual credits

#### 2.1 Management

#### Man 01 - Sustainable procurement

This section is comprised of BREEAM 2008 sections;

- Man 1: Commissioning 2 credits, as previously
- Innovation credit: BREEAM AP Now increased to 3 credits, with the first credit now split into 2 credits and the second credit remaining the same.

In addition there are new credits as follows;

- 1 credit for post construction thermo-graphic survey and remedial works where required
- 1 credit for a defined decision making process (to include the design team, contractor and occupier); agreed roles / responsibilities and schedule of training for building manager(s).
- 1 credit for post occupancy monitoring to collect energy & water data for 12 months post occupation and 'aftercare support'.

#### 2.1/....

#### Man 02 - Responsible construction practices

This section is comprised of BREEAM 2008 section Man 2: Considerate Constructors and is worth 2 credits, as previously assessed under BREEAM 2008

#### Man 03 - Construction site impacts

This section takes a number of the BREEAM 2008 Man 3 sections and awards credits as follows;

- 1 credit for site energy targeting, monitoring and reporting (an enhancement of 2008 Man 3 item a)
- 1 credit for site water targeting, monitoring and reporting (an enhancement of 2008 Man 3 itemc)
- 1 credit for site transport monitoring and reporting an enhancement of 2008 Man
   3 item b)
- 1 credit for sourcing sustainable site timber (similar to 2008 Man 3 timber credit)
- 1 credit for construction site management (EMS & pollution management similar to 2008 Man 3 items d, e & g)*Man 04 Stakeholder participation*

This section is comprised of BREEAM 2008 sections;

- Man 4: Building user guide 1 credit, as previously
- Man 6: Consultation 1 credit, for covering the requirements of both 2008 credits and now also applies to commercial buildings. For schools this also now includes some elements of 2008 credit LE7.
  - In addition there are new credits as follows;
- 1 credit for ensuring building accessibility, this contains some of the 2008 Man 7 credit requirements
- 1 credit for carrying out Post Occupancy Evaluation

#### Man 05 - Life cycle cost and service life planning

This section is comprised of BREEAM 2008 section Man 12 – Life cycle costing which is now increased to 3 credits, with the first credit now split into 2 credits and the second credit remaining the same.

#### 2.2 Health & Wellbeing

#### Hea 01 - Visual comfort

This section is comprised of BREEAM 2008 sections;

- Hea 4: High frequency lighting No credit value, but a minimum requirement for all rating levels
- Hea 1: Daylighting 1 -2 credits, depending on building type
- Hea 2: View out and Hea 3: Glare control Generally 1 credit, for both sections (2 credits for some healthcare buildings)
- Hea 5: Internal & external lighting levels and Hea 6: Lighting zones & controls 1 credit, for both sections
- Hea 19: Arts in health 1 credit, for healthcare only

#### Hea 02 - Indoor air quality

This section is comprised of BREEAM 2008 sections;

- Hea 7: Potential for natural ventilation 1 credit, as previously
- Hea 8: Internal air pollution 1 credit, as previously
- Hea 9: Volatile organic compounds 1 credit, as previously
- Hea 17: Specification of laboratory fume cupboards and Hea 18: Containment Level 2 & 3 laboratory areas - 1 credit, for both sections (only applicable where labs within the building)

In addition there is a new credit as follows;

1 credit for pre-occupancy VOC testing

#### Hea 03 - Thermal comfort

This section is comprised of BREEAM 2008 sections;

- Hea 10: Thermal comfort 1 credit, as previously assessed under BREEAM 2008
- Man 11: Thermal zoning 1 credit, as previously assessed under BREEAM 2008

#### Hea 04 - Water quality

This section is comprised of BREEAM 2008 sections Hea 12: Prevention of legionella and Hea 16; Drinking water worth 1 credit, for both sections

#### Hea 05 - Acoustic performance

This section is comprised of BREEAM 2008 section Hea 13: Acoustic performance worth 1 - 3 credits, as previously assessed under the 2008 scheme.

#### Hea 06 - Safety & security

This section is comprised of BREEAM 2008 sections;

- Man 8: Security 1 credit, as previously and now also applies to commercial buildings
- Tra 4: Pedestrian & cyclist safety & Tra 8: Deliveries and Manoeuvring Now 1 credit for both sections, all building types

#### 2.3 Energy

#### Ene 01 - Reduction of CO2 emissions

Minimum standard requirements – 6 credits required for Excellent rating. A 25% reduction relative to the building TER is required in order to achieve a BREEAM Excellent rating.

This section is comprised of BREEAM 2008 section Ene 1:Reduction in CO2 emissions and is still worth 15 credits available with the top score still awarded for zero net CO2, however there is a new calculation method based on the TER from Part L BRUKL calculations rather than the EPC used for BREEAM 2008. At this stage it is difficult to be clear on what impact this is likely to have on scoring as the Ene 1 BREEAM calculator is not yet available.

#### Ene 02 - Energy monitoring

Minimum standard requirements;

This section is comprised of BREEAM 2008 sections;

- Ene 2: Sub-metering of major energy uses now 1 credit, for all building types and no specific requirement for BEMS for healthcare buildings.
- Ene 3: Sub-metering of tenancy areas 1 credit, as previously (except schools)

#### Ene 03 - External lighting

This section is comprised of BREEAM 2008 section Ene 4: External lighting worth 1 credit, as previously

#### Ene 04 – Low & zero carbon technologies

This section is comprised of BREEAM 2008 sections;

- Ene 5: Low and zero carbon technologies 1 credit for feasibility study or green tariff in addition 1 further credit for 10% renewable energy
- Innovation credit: Ene 5 − 1 credit for 20% renewable energy (rather than the previous 15% under Ene 5)
- Ene 10: Free cooling 1 credit, as previously but now for all building types

In addition there is a new credit as follows;

 1 credit where the feasibility study also includes an LCA of the carbon impact of the chosen LZC system(s) and this results in a lifecycle reduction in CO2 emissions

#### Ene 06 - Energy efficient transportation systems

This section is comprised of BREEAM 2008 sections Ene 8: Lifts and Ene 9: Escalators and travelling walkways and is worth 2 credits. The first credit covers a transport analysis and system selection, the second covers specification of energy efficient features (both credits now cover lifts and escalators).

#### 2.4 Transport

#### Tra 01 - Public transport accessibility

This section is comprised of BREEAM 2008 section Tra 1: Provision of public transport and is worth 2-5 credits, as previously (3 for offices & schools, 5 credits most other schemes).

Additionally, there is now also the option to get a maximum of 1 credit for buildings with a fixed shift pattern where a dedicated bus service is provided for building users. This is only available where no credits are achievable for scheduled public transport services.

#### Tra 02 - Proximity to amenities

This section is comprised of BREEAM 2008 section Tra 2: Proximity to amenities and is worth 1 credit for most schemes, with 2 credits available for Multi-Residential.

#### Tra 03 - Cyclist facilities

This section is comprised of BREEAM 2008 section Tra 3: Cyclist facilities and is worth 2 credits for most schemes. It is now possible to reduce cycle facilities by 50% if at least half the available Tra 1 credits have been achieved.

#### Tra 04 - Maximum car parking capacity

This section is comprised of BREEAM 2008 section Tra 6: Maximum car parking capacity and is worth 1 credit only for Healthcare

#### Tra 05 - Travel plan

This section is comprised of BREEAM 2008 section Tra 5: Travel plan and is still worth 1 credit.

#### 2.5 Water

#### Wat 01 - Water consumption

This section combines BREEAM 2008 sections Wat 1: Water consumption and Wat 5: Water recycling and is now worth 5 credits. There is a new calculation method for all building types based on percentage improvement over a baseline of 'standard' sanitary fitting.

As the Wat 1 BREEAM calculator is not yet available is it is difficult to judge scoring impact at present.

#### Wat 02 - Water monitoring

This section combines BREEAM 2008 sections Wat 2: Water meter and Innovation credit: Wat 2 (where relevant) with 1 credit available for both sections.

#### Wat 03 - Leak detection

This section is comprised of BREEAM 2008 sections;

- Wat 3: Major leak detection 1 credit, as previously assessed under BREEAM 2008
- Wat 4: Sanitary supply shut off 1 credit, as previously assessed under BREEAM 2008

#### Wat 04 - Water efficient equipment

1 credit - all schemes, although may be filtered out if not relevant to building

This section is comprised of BREEAM 2008 sections Wat 6: Irrigation system and Wat 7: Vehicle wash and is now worth 1 credit for both sections.

#### 2.6 Materials

#### Mat 01 - Life cycle impacts

This section is comprised of BREEAM 2008 section Mat 1: This is equivalent to the 2008 scheme.

#### Mat 02 - Hard landscaping and boundary protection

This section is comprised of BREEAM 2008 section Mat 2: Hard landscaping and boundary protection and is still worth 1 credit.

#### Mat 03 - Responsible sourcing of materials

This section is comprised of BREEAM 2008 section Mat 5: Responsible sourcing of materials and is still worth 3 credits.

#### Mat 04 - Insulation

This section is comprised of BREEAM 2008 section Mat 6: Insulation and is still worth 2 credits.

#### Mat 05 - Designing for robustness

This section is comprised of BREEAM 2008 section Mat 7: Designing for robustness and is still worth 1 credit.

#### 2.7 Waste

#### Wst 01 - Construction site waste management

This section is comprised of BREEAM 2008 section Wst 1: Construction site waste management and is still worth 4 credits although waste benchmarks have been revised slightly.

#### Wst 02 - Recycled aggregates

This section is comprised of BREEAM 2008 section Wst 2: Recycled aggregate and is still worth 1 credit but now includes recycled aggregate targets for individual building elements.

#### Wst 03 - Operational waste

This section is comprised of BREEAM 2008 sections Wst 3: Recyclable waste storage, Wst 4: Compactor/baler and Wst 5: Composting and is now worth 1 credit for all sections (as relevant).

#### Wst 04 - Speculative floor & ceiling finishes

This section is comprised of BREEAM 2008 section Wst 6: Floor finishes and is still worth 1 credit but has now been extended to include ceilings.

#### 2.8 Land Use & Ecology

#### LE 01 - Site selection

This section is comprised of BREEAM 2008 sections;

- LE 1: Reuse of land 1 credit, as previously assessed under BREEAM 2008
- LE 2: Contaminated land 1 credit, as previously assessed under BREEAM 2008

#### LE 02 – Ecological value of site and protection of ecological features

This section is comprised of BREEAM 2008 section LE 3: Ecological value of site and protection of ecological features and is still worth 1 credit.

#### LE 03 - Mitigating ecological impact

This section is comprised of BREEAM 2008 section LE 4: Mitigating ecological impact and is still worth 2 credits but uses revised habitat types.

#### LE 04 - Enhancing site ecology

This section is comprised of BREEAM 2008 section LE 5: Enhancing site ecology and is still worth 3 credits but uses revised habitat types.

#### LE 05 – Long term impact on biodiversity

This section is comprised of BREEAM 2008 section LE 6: Long term impact on biodiversity and is still worth 2 credits. Note this now includes the requirements of 2008 credit LE8 as an additional item for school assessments.

#### 2.9 Pollution

#### Pol 01 - Impact of refrigerants

This section is comprised of BREEAM 2008 section;

 Pol 2: Refrigerant leak detection – Now 1 credit only for both leak detection and pump down

In addition there are new credits as follows;

- 1 credit where refrigerants have a direct effect life cycle CO2 equivalent of ≤ 1000 kgCO2e/kW cooling capacity
- 1 further credit where refrigerants have a direct effect life cycle CO2 equivalent of ≤ 100 kgCO2e/kW cooling capacity or GWP ≤10 (this would be met by achieving 2008 section Pol 1).

#### Pol 02 - NOx emissions

This section is comprised of BREEAM 2008 section Pol 4: NOx emissions and is still worth 3 credits.

#### Pol 03 - Surface water run-off

5 credits - all schemes

This section is comprised of BREEAM 2008 sections;

- Pol 5: Flood risk 3 credits, as previously
- Pol 6: Minimising watercourse pollution 1 credit, as previously assessed under BREEAM 2008

In addition there is a new credit as follows;

 1 credit for additional attenuation of surface water run-off to ensure that local flooding will not occur in the event of local drainage system failure. This is in line with the requirements of the Code for Sustainable Homes.

#### Pol 04 - Reduction of night time light pollution

This section is comprised of BREEAM 2008 section Pol 7: Reduction of night time light pollution and is still worth 1 credit.

#### Pol 05 - Noise attenuation

This section is comprised of BREEAM 2008 section Pol 8: Noise attenuation and is still worth 1 credit.

#### 2.10 Innovation

#### Man 01 - Sustainable procurement

1 credit for a 3 year commitment to monitor energy, water and occupancy satisfaction

#### Man 02 - Responsible construction practices

1 credit as 2008 Man 2 innovation credit.

#### Hea 01 - Visual comfort

1 credit as 2008 Hea 1 innovation credit.

#### Ene 01 - Reduction of CO2 emissions

Increased to 5 credits for a 'carbon negative' building

#### Ene 04 – Low or zero carbon technologies

1 credit for a 30% reduction in CO2 emissions as a result of specifying local LZC technologies

#### Wat 01 - Water consumption

1 credit for 65% improvement over benchmark

#### Mat 01 - Life cycle impacts

1 credit as 2008 Mat 1 innovation credit

#### Mat 03 - Responsible sourcing of materials

1 credit as 2008 Mat 5 innovation credit

#### Wst 01 - Construction site waste management

1 credit as 2008 Wst 1 innovation credit but now must <u>also</u> meet highest waste benchmark as well.

#### **Brady, Thomas**

From:
Sent: 27 October 2011 19:27
To: Brady, Thomas

Cc:

Subject: BREEAM 2011 Pre-Assessment Checklist

Attachments: BREEAM 2011 Spread sheet.pdf

Project 11276A: RHSC/DCN Reference Design

Our Ref: 11276A/EDI/OEML/0215

Tom

Please find attached below a copy of our new 2011 BREEAM pre-assessment checklist for the combined RHSC/DCN building. The checklist builds on discussions and assumptions made during our 2008 BREEAM pre-assessment checklist exercise which was issued back in July.

As before, credits within the checklist are, at this stage, broken down into three categories;

- Best Value BREEAM credits Credits which form the basis of best practice design and which benefit the overall design with limited additional cost
- Add-ons for excellent credits Technically challenging credits above best practice design which have implications on project cost, procurement strategy and site space requirements.
- Unlikely credits Credits which are deemed unobtainable / unlikely for the reasons detailed

Each credit has been assigned to the relevant reference design team members and to the client, it should be noted that there are numerous design team and client driven credits which will require early action to ensure credits can be awarded. I have also included a second column entitled "ultimate Successful Bidder Action" to highlight that it will be the responsibility of the client and the eventual design team to ensure that credit criteria is met.

Please note the checklist is best printed A3.

Please call if you wish to discuss the check list in further detail.

Regards

Jonathan

(See attached file: BREEAM 2011 Spread sheet.pdf)

Jonathan McMillan

Hulley & Kirkwood Consulting Engineers
The Stack
Ground Floor
Papermill Wynd
McDonald Road
Edinburgh
EH7 4QL

.....Making Buildings Work

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## BREEAM Scoring Prediction

Project Title	H&K Project Reference	Date	Prepared by
RHSC/DCN	11276A	Oct-11	J McM



Assessment Area	Credit	Credits Available		Credit Potential		Comments	Cost Reference Design S	
			Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits		Action	Action
Management	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits	Comments	Cost Reference Design S Action	age Ultimate Successful Bidder Action
Sustainable Procurement	Man 01	8	5	3	0	BREEAM AP - A BREEAM AP should form part of the final design team and should see the project through from Stage A to Stage L. Site Energy and Water Monitoring - The potential exists for all credits to be achieved. PPP (or equivalent) contract will require that metering, monitoring, targeting and reporting of energy and water use is carried out. These credits generally represent Best Value BREEAM credits. Commissioning - All relevant M&E items could be incorporated into the M&E Specification. All other requirements could be incorporated into Prelims as appropriate.	Design Team, Contr and NHSL	actor Design Team, Contractor and NHSL
Responsible Construction Practices	Man 02	2	1	1	0	A score of 36 may be difficult to achieve given the congested nature of the site. A score of 32 - 35.5 may be a more realistic target for this credit.	NHSL and Nighting	ale NHSL and Architect and Contractor
Construction Site Impacts	Man 03	5	5	0	0	Requirement should form part of prelims. Care should be taken to ensure that an adequate level of monitoring and targeting is identified and planned for prior to works commencing.	NHSL and Nighting	ale NHSL and Architect and Contractor
Stakeholder Participation	Man 04	4	2	2	0	Level of consultation to be confirmed. Consultation should have already taken place, and the eventual bid team design would need to go through a fresh round of consultation.	NHSL and C	NHSL and Architect
Life Cycle Costing and Service Life Planning	Man 05	3	1	0	2	Early Action is Required. Life Cycle costing is feasible, however there may be significant cost associated with a 60 year Strategic LCC and a 60 year Technical LCC. Credits associated with Strategic and Technical LCC are discounted at present, but could be "bought" at a later date if required to achieve a desired certification level. These credits would fall into the credit criteria "Add-on for Excellent"	Design Team and N	HSL Design Team, Contractor and NHSL
	Totals	22	14	6	2		•	•
	Percentage	100	64	27	9			
	Weighted Totals	2.64	1.68	1	0.24			
	Weighted Percentage	12	8	3	1			

	weighted Percentage	12	8	3	1			
Health & Wellbeing	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits	Comments	Cost Reference Design Stag	Ultimate Successful Bidde
Visual Comfort	Hea 01	6	4	0	2	The restricted nature of the site suggests that daylight factors will most likely not be achieved. It may be that once a successful bid team has prepared glazing and facade elevations and carried out appropriate building daylight simulation/modelling that these credits are achieved. However until such an exercise is carried out the credits will be discounted. These credits should be considered "unlikely"	Architect	Architect
Indoor Air Quality	Hea 02	5	2	2	1	Minimising Air Pollution- The proximity of opening windows relative to site car parks and access roads suggests that this credit will not be achieved. This credit should be considered "Unlikely"	HK and Nightingale	M&E Engineer and Architect
Thermal Comfort	Hea 03	2	2	0	0	Credits are achievable. The eventual bid-team should ensure that they have sufficient resource with the ability to perform a meaning full and accurate thermal analysis of complex buildings.	H&K	M&E Engineer
Water Quality	Hea 04	1	1	0	0	Credit should be achieved by default given the requirements of SHTM 2027 in relation to Legionella control	H&K	M&E Engineer
						Design Issue  Need to understand any potential costs for pre-completion acoustic testing in line with HTM08-01 and BREEAM requirements and possible costs to undertake remedial works for any non-compliant spaces.  Cost allowances to be considered		
Acoustic Performance		2	0	2	0	1st credit - Enhanced control of Sound transfer, acoustic testing throughout. 2nd credit - Control of reverberation and acoustic testing.	Nightingale	Architect & Contractor
	Hea 05					With respect to Arups OBC Acoustic Design Report, October 2010 Oliver Atack suggested that whilst both credits are technically possibly, practically these may be difficult to achieve. (See11276/EDI/IEML/1802 and correspondence from Oliver Atack)		
Safety & Security	Hea 06	2	2	0	0	Early Action Required. An infrastructure analysis should be carried out to confirm safe pedestrian / cyclist access to site. An Architectural Liaison Officer (ALO) or Crime Prevention Design Advisor (CPDA) should be consulted with at RIBA Stage C or equivalent.	NHSL and Nightingale	NHSL and Architect
	Totals	18	11	4	3		, , ,	1
	Porcontago	100.0	61.1	22.2	16.7			

	Weighted Fercentage	10.0	5.2	0.0	2.0				
Energy	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits	Comments	Cost	Reference Design Stage	Ultimate Successful Bid
Reduction of CO2 emissions	Ene 01	15	5	0	10	Dependant on chosen Energy Strategy.  Mandatory requirement for Excellent is 25% reduction relative to 2010 TER  Reference Design SBEM model has been completed. This suggests that this target may not be  achievable for this site.		H&K	M&E Engineer
Energy Monitoring	Ene 02	2	2	0	0	Credit could be incorporated into M&E design and spec as appropriate. Sub-metering would be extensive and incur a proportional additional cost. Potentially an additional 100 BMS linked meters.	£50,000	H&K	M&E Engineer
External Lighting	Ene 03	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate		H&K	M&E Engineer
Low and Zero Carbon Generating Technology	Ene 04	5	4	0	1	Building will not pass Section 6 2010 without the presence of onsite LZCGTs. Current provision of gas fired CHP and a large solar PV array reduce building CO2 emissions by approximately 40%		H&K	M&E Engineer
Energy Efficient Cold Storage	Ene 05	NA	NA	NA	NA	NA	NA	NA	NA
Energy Efficient Transport Systems	Ene 06	2	2	0	0	Credits for energy efficient transportation system can be achieved, however this will be at an increased cost.		H&K	M&E Engineer
Energy Efficient Laboratory Systems	Ene 07	1	0	0	1	High risk area requiring client to undertake detailed, comparative energy studies examining all specified equipment.		H&K & Nightingale	M&E Engineer & NHS
Energy Efficient Equipment	Ene 08	2	0	2	0	High risk area requiring client to undertake detailed, comparative energy studies examining all specified equipment.		NHSL and Nightingale	NHSL and Architect
Drying Space	Ene 09	NA	NA	NA	NA	NA	NA	NA	NA
	Totals	28	14	2	12				
	Dt	400.0	FO 0	7.4	40.0				

March   Security   S	Transport	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits	Comments	Cost	Reference Design Stage	Ultimate Successful Bidder
Part			5			1				Action NHSL
Property			1	1	0	0	Design Issue			İ
April   Process   Proces		Tra 02			-	-	Location of cycle storage area to be integrated with site transport / infrastructure design. Credit would need to be designed in to both internal and external space planning. Numbers would		1,1102	5
Color   Colo							Based on 500 building users - 50 + 18 cycle racks need to be provided based on 172 beds 68 BREEAM compliant cycle racks to be provided. Reduced by 50% for City Centre location (34			
Marcin Carl Public   Part	Cyclist Facilities		2	0	2	0	2nd Credit  Cost to be provided for two of the following compliant facilities must be provided for the building users:  a. Compliant showers (1 per 10 racks = 4)	£100,000	NHSL & Nightingale	NHSL & Architect
March   Part		Tra 03					c. Compliant drying space for wet clothes (compliant drying space)  Staff shower and changing facilities would have to be made available to the public or a separate			
Table	Maximum Car Parking Capacity	Tra 04	1	0	1	0	NHSL to confirm anticipated number of patients, staff and visitors. Architect to confirm number of	TGP to Advise	NHSL	NHSL
Marcine   Marc	Travel Plan	Tra 05	1	1	0	0			NHSL	NHSL
Page   Page				-		10.0				
Mark Consumption		Weighted Totals	0.8	0.5	0.2	0.1				
Marcon   M		Weighted Percentage	8.0	4.8	2.4	0.8				
Miles	Water	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits	Comments	Cost		Ultimate Successful Bidder
Marcian Continue				1	2	2	Detailed analysis to be carried out. Conformation of percentage improvement required before more than one credit can provisionally be awarded. Care should be taken to ensure that			Action  NHSL & Architect
Water   Fill   Control	Water Monitoring		1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate		H&K	M&E Engineer
Part   Part	Water Leak Detection and Prevention	Wat 03	2	1	1	0	practice and additionally will provide negligible benefit at significant additional cost.		NHSL & Nightingale	NHSL & Architect
Percentage	Water Efficient Equipment		·		-	0			NHSL & Nightingale	NHSL & Architect
Major Trials   15					·	22.2				
Noticity   Order   Order Applicate   Section		Weighted Totals	0.5	0.2	0.2	0.1				
Ministrate   Color		Weighted Percentage	6.0	2.0	2.7	1.3				
Hard Landscaping and Boundary Protection   May 12   1							_			
Responsible Sourcing	Materials	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits	Comments	Cost		Ultimate Successful Bidder Action
Nacional Sourcing  Mar 03		Mat 01			Add-ons For Excellent	Unlikely Credits	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.	Cost	Action Nightingale	Action Architect
Season   Marg 4	Life Cycle Impacts	Mat 01		3	1	Unlikely Credits 2	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating. It should be feasible to achieve this rating	Cost	Action Nightingale	Action
Totals	Life Cycle Impacts  Hard Landscaping and Boundary Protection	Mat 01 Mat 02	6	3	1	Unlikely Credits  2  0 2	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback	Cost	Action  Nightingale  Nightingale & Arup	Action Architect
Percentage	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing	Mat 01 Mat 02 Mat 03	6 1 3	3 0 0	1	Unlikely Credits  2  0  2	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and	Cost	Action  Nightingale  Nightingale & Arup  Nightingale	Action  Architect  Architect & Civil
Weighted Potents   1.6	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation	Mat 01 Mat 02 Mat 03 Mat 04 Mat 05	6 1 3 2 1	3 0 0 0	1 1 1 1 0	2 0 2	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback	Cost	Action  Nightingale  Nightingale & Arup  Nightingale  Nightingale	Architect Architect & Civil Architect & Contractor Architect & Contractor
Need   Credit   Cre	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation	Mat 01 Mat 02 Mat 03 Mat 04 Mat 05 Totals	6 1 3 2 1 1 13	0 0 0 1 4	1 1 1 1 0 4	2 0 2	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback	Cost	Action  Nightingale  Nightingale & Arup  Nightingale  Nightingale	Architect Architect & Civil Architect & Contractor Architect & Contractor
Construction Waste Management  West 1 4 3 0 0 1 Credit could be incorporated into Pretime as appropriate. Industry feedback could help used in Mightingale  Construction Waste Management  West 2 1 0 0 0 1 Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  West 2 1 0 0 1 0 DESCRIPTION OF THE Pretiments in a per difficult to achieve given also restrictions for revised RHCS/DCN.  Coperational Waste  West 3 0 0 1 Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  DESCRIPTION OF THE Pretiments in a per difficult to achieve given also restrictions for revised RHCS/DCN.  Committee Troubles  West 4 NA NA NA NA NA NA NA NA NA NA NA NA NA	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation	Mat 01 Mat 02 Mat 03 Mat 04 Mat 05 Totals Percentage Weighted Totals	6 1 3 2 1 13 100.0 1.6	3 0 0 0 1 4 30.8 0.5	1 1 1 1 0 4 30.8 0.5	2 0 2	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback	Cost	Action  Nightingale  Nightingale & Arup  Nightingale  Nightingale	Architect Architect & Civil Architect & Contractor Architect & Contractor
Construction Waste Management	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation	Mat 01 Mat 02 Mat 03 Mat 04 Mat 05 Totals Percentage Weighted Totals	6 1 3 2 1 13 100.0 1.6	3 0 0 0 1 4 30.8 0.5	1 1 1 1 0 4 30.8 0.5	2 0 2	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback	Cost	Action  Nightingale  Nightingale & Arup  Nightingale  Nightingale	Architect Architect & Civil Architect & Contractor Architect & Contractor
Recycled Aggregates	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness	Mat 01 Mat 02 Mat 03 Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage	6 1 3 2 1 13 100.0 1.6 12.5	3 0 0 0 1 4 30.8 0.5 3.8	1 1 1 1 0 4 30.8 0.5 3.8	2 0 2 1 0 5 38.5 0.6 4.8	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.		Action  Nightingale  Nightingale & Arup  Nightingale  Nightingale  Nightingale  Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder
Operational Waste	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage Credit	6  1 3 2 1 13 100.0 1.6 12.5  Credits Available	3 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 0 2 1 0 5 38.5 0.6 4.8	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.		Action  Nightingale  Nightingale & Arup  Nightingale  Nightingale  Nightingale  Nightingale  Reference Design Stage  Action	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder  Action
Need to ensure required area can be included in design (internally) or externally)	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1	6  1  3  2  1  13  100.0  1.6  12.5  Credits Available	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3	1 1 1 1 0 4 30.8 0.5 3.8 Add-ons For Excellent	2 0 2 1 0 5 38.5 0.6 4.8	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.		Action  Nightingale  Nightingale & Arup  Nightingale  Nightingale  Nightingale  Nightingale  Nightingale  Reference Design Stage  Action  Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder  Action  Contractor
Name	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1	6  1 3 2 1 13 100.0 1.6 12.5  Credits Available 4	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3 0	1 1 1 1 0 4 30.8 0.5 3.8  Add-ons For Excellent 0	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN.		Nightingale Nightingale & Arup Nightingale & Arup Nightingale Nightingale Nightingale Nightingale Reference Design Stage Action Nightingale Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder  Action  Contractor
Percentage   100.0   50.0   16.7   33.3     Weighted Totals   0.5   0.2   0.1   0.2     Weighted Percentage   7.5   3.8   1.3   2.5     Site Selection   Left   2   1   0   1   Based on Previous Arup comments for RHSC   Nightingale/ Ecologist   Architect / Ecologist   Architect / Ecologist   Architect / Ecologist   Architect / Ecologist   EE3   2   2   2   0   Based on Previous Arup comments for RHSC   Nightingale/ Ecologist   Architect / Ecologist   Architect / Ecologist   Architect / Ecologist   Ecology   ELE4   3   2   2   2   0   Based on Previous Arup comments for RHSC   Nightingale/ Ecologist   Architect / Ecologist	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1 Wst 2	6  1 3 2 1 13 100.0 1.6 12.5  Credits Available 4	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3 0	1 1 1 1 0 4 30.8 0.5 3.8  Add-ons For Excellent 0	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.		Nightingale Nightingale & Arup Nightingale & Arup Nightingale Nightingale Nightingale Nightingale Reference Design Stage Action Nightingale Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder  Action  Contractor  Contractor
Weighted Totals   0.5   0.2   0.1   0.2   0.5   0.2   0.1   0.2   0.5   0.2   0.1   0.2   0.5   0.2   0.1   0.2   0.5   0.2   0.1   0.2   0.5   0.2   0.1   0.2   0.5   0.2   0.1   0.2   0.5   0.2   0.5   0.2   0.5   0.2   0.5   0.2   0.5   0.2   0.5   0.2   0.5   0.5   0.2   0.5	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2	6  1  3  2  1  13  100.0  1.6  12.5  Credits Available  4  1	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3 0	1 1 1 1 0 4 30.8 0.5 3.8 Add-ons For Excellent 0 0	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits 1	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.  Need to ensure required area can be included in design (internally or externally)	Cost	Nightingale Nightingale & Arup Nightingale & Arup Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  Contractor  Contractor  NHSL & Architect
Land Use & Ecology Credit Credit Available Best Value BREEAM Credits Add-ons For Excellent Unlikely Credits Dite Selection Site Selection LE1 2 1 0 1 Based on Previous Arup comments for RHSC Nightingale / Ecologist Architect / Ecologist Architect / Ecological Value of Site and Protection of Ecological Features LE2 1 1 0 0 Based on Previous Arup comments for RHSC Nightingale / Ecologist Architect / Ecologist Architect / Ecologist Architect / Ecologist Nightingale / Ecologist Architect / Ecologist Site Ecology LE3 2 2 0 0 Based on Previous Arup comments for RHSC Nightingale / Ecologist Architect / Ecologist Architect / Ecologist Site Ecology LE4 3 2 2 1 0 Based on Previous Arup comments for RHSC Nightingale / Ecologist Architect / Ecologist	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2  Wst 3  Wst 4 Totals	6  1 3 2 1 13 100.0 1.6 12.5  Credits Available 4 1 1 1 NA 6	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3 0	1 1 1 1 0 4 30.8 0.5 3.8  Add-ons For Excellent 0 0 1	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits 1	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.  Need to ensure required area can be included in design (internally or externally)	Cost	Nightingale Nightingale & Arup Nightingale & Arup Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  Contractor  Contractor  NHSL & Architect
Clear State Selection   LE1	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste	Mat 01 Mat 02  Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2  Wst 3  Wst 4  Totals Percentage	6  1  3  2  1  13  100.0  1.6  12.5  Credits Available  4  1  1  NA  6  100.0  0.5	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3 0 0 NA 3 50.0	1 1 1 1 1 0 4 30.8 0.5 3.8  Add-ons For Excellent 0 0 1 NA 1 16.7	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits 1	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.  Need to ensure required area can be included in design (internally or externally)	Cost	Nightingale Nightingale & Arup Nightingale & Arup Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  Contractor  Contractor  NHSL & Architect
Ecological Value of Site and Protection of Ecological Features	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste	Mat 01 Mat 02  Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2  Wst 3  Wst 4  Totals Percentage	6  1  3  2  1  13  100.0  1.6  12.5  Credits Available  4  1  1  NA  6  100.0  0.5	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3 0  NA 3 50.0 0.2	1 1 1 1 0 4 30.8 0.5 3.8  Add-ons For Excellent 0 0 1 NA 1 16.7 0.1	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits 1	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Architectural design and spec as appropriate.  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.  Need to ensure required area can be included in design (internally or externally)	Cost	Nightingale Nightingale & Arup Nightingale & Arup Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  Contractor  Contractor  NHSL & Architect
Mitigating Ecological Impact         LE3         2         2         0         0         Based on Previous Arup comments for RHSC         Nightingale / Ecologist         Architect / Ecologist	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste  Speculative Floor and Ceiling Finishes  Land Use & Ecology	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2  Wst 3  Wst 4 Totals Percentage Weighted Totals Weighted Percentage	6  1 3 2 1 13 100.0 1.6 12.5  Credits Available 4 1 1  NA 6 100.0 0.5 7.5	3 0 0 0 1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3 0  NA 3 50.0 0.2 3.8	1 1 1 1 1 0 4 30.8 0.5 3.8 0.5 3.8  Add-ons For Excellent 0 0 1 NA 1 16.7 0.1 1.3  Add-ons For Excellent	2  1 0 2 1 0 5 38.5 0.6 4.8  Unlikely Credits 1 1 0  NA 2 33.3 0.2 2.5	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.  Need to ensure required area can be included in design (internally or externally)  NA	Cost	Nightingale Nightingale & Arup Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale Nightingale NHSL & Nightingale NHSL & Nightingale	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder  Action  NHSL & Architect  NA  Ultimate Successful Bidder  Action
Le5   2   2   0   0   Based on Previous Arup comments for RHSC   Nightingale / Ecologist   Architect	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste  Speculative Floor and Ceiling Finishes  Land Use & Ecology  Site Selection	Mat 01 Mat 02  Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2  Wst 3 Wst 4 Totals Percentage Weighted Totals Weighted Percentage	6  1  3  2  1 13 100.0 1.6 12.5  Credits Available  4  1  NA 6 100.0 0.5 7.5  Credits Available 2	3  0  0  1  4  30.8  0.5  3.8  Best Value BREEAM Credits  3  0  NA  3  50.0  0.2  3.8  Best Value BREEAM Credits	1 1 1 1 1 0 4 30.8 0.5 3.8  Add-ons For Excellent 0 1 NA 1 16.7 0.1 1.3  Add-ons For Excellent	2  1 0 2 1 0 5 38.5 0.6 4.8  Unlikely Credits 1 1 0  NA 2 33.3 0.2 2.5	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN.  Comments required.  Need to ensure required area can be included in design (internally or externally)  NA  Comments  Based on Previous Arup comments for RHSC	Cost	Nightingale  Nightingale & Arup  Nightingale & Arup  Nightingale  Nightingale  Nightingale  Nightingale  Reference Design Stage Action  Nightingale  NHSL & Nightingale  NHSL & Nightingale  NA  Reference Design Stage  Action  Nightingale / Ecologist	Action  Architect  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  Contractor  NHSL & Architect  NA  Ultimate Successful Bidder
Totals         10         8         1         1           Percentage         100.0         80.0         10.0         10.0           Weighted Totals         1.0         0.8         0.1         0.1	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste  Speculative Floor and Ceiling Finishes  Land Use & Ecology  Site Selection  Ecological Value of Site and Protection of Ecological Features  Mitigating Ecological Impact	Mat 01 Mat 02 Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2  Wst 3  Wst 4 Totals Percentage Weighted Totals Weighted Totals  Credit  LE1 LE2 LE3	6  1 3 2 1 13 100.0 1.6 12.5  Credits Available 4 1 1  NA 6 100.0 0.5 7.5  Credits Available 2 1 1 2	3  0  0  1 4 30.8 0.5 3.8  Best Value BREEAM Credits 3  0  NA 3 50.0 0.2 3.8  Best Value BREEAM Credits 1 1 2	1 1 1 1 1 0 4 30.8 0.5 3.8 0.5 3.8  Add-ons For Excellent 0 0 1 NA 1 16.7 0.1 1.3  Add-ons For Excellent 0 0 0 0	2  1 0 2 1 0 5 38.5 0.6 4.8  Unlikely Credits 1 1 0  NA 2 33.3 0.2 2.5	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications  BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN.  Comments required.  Need to ensure required area can be included in design (internally or externally)  NA  Comments  Based on Previous Arup comments for RHSC  Based on Previous Arup comments for RHSC  Based on Previous Arup comments for RHSC	Cost	Nightingale  Nightingale & Arup  Nightingale  Nightingale  Nightingale  Nightingale  Nightingale  Reference Design Stage Action  Nightingale  NHSL & Nightingale  NHSL & Nightingale  NA  Reference Design Stage Action  Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist	Action  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  NHSL & Architect  NA  Ultimate Successful Bidder Action  Architect / Ecologist Architect / Ecologist Architect / Ecologist Architect / Ecologist
Weighted Totals         1.0         0.8         0.1         0.1	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste  Speculative Floor and Ceiling Finishes  Land Use & Ecology  Site Selection  Ecological Value of Site and Protection of Ecological Features  Mitigating Ecological Impact Enhancing Site Ecology	Mat 01 Mat 02  Mat 03  Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1  Wst 2  Wst 3  Wst 4  Totals Percentage Weighted Totals  Vest 4  Totals Percentage  Weighted Totals  LE1  LE2  LE3  LE4	6  1  3  2  1  13  100.0  1.6  12.5  Credits Available  4  1  1  NA  6  100.0  0.5  7.5  Credits Available  2  1  2  3	3  0  0  1  4 30.8 0.5 3.8  Best Value BREEAM Credits  3  0  NA 3 50.0 0.2 3.8  Best Value BREEAM Credits  1 1 2 2	1 1 1 1 1 1 0 4 30.8 0.5 3.8  Add-ons For Excellent 0 0 1 NA 1 16.7 0.1 1.3  Add-ons For Excellent 0 0 1 1 1 1.3	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits 1 1 0 NA 2 33.3 0.2 2.5 Unlikely Credits 1 0 0	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN.  Comments required.  Need to ensure required area can be included in design (internally or externally)  NA  Comments  Based on Previous Arup comments for RHSC Based on Previous Arup comments for RHSC Based on Previous Arup comments for RHSC Based on Previous Arup comments for RHSC	Cost	Nightingale  Nightingale & Arup  Nightingale & Arup  Nightingale  Nightingale  Nightingale  Nightingale  Reference Design Stage Action  Nightingale  NHSL & Nightingale  NHSL & Nightingale  NA  Reference Design Stage Action  Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist	Action  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  Contractor  NHSL & Architect  NA  Ultimate Successful Bidder Action  Architect / Ecologist Architect / Ecologist Architect / Ecologist Architect / Ecologist Architect / Ecologist Architect / Ecologist
	Life Cycle Impacts  Hard Landscaping and Boundary Protection  Responsible Sourcing  Insulation  Designing For Robustness  Waste  Construction Waste Management  Recycled Aggregates  Operational Waste  Speculative Floor and Ceiling Finishes  Land Use & Ecology  Site Selection  Ecological Value of Site and Protection of Ecological Features  Mitigating Ecological Impact Enhancing Site Ecology	Mat 01 Mat 02 Mat 03 Mat 04 Mat 05 Totals Percentage Weighted Totals Weighted Percentage  Credit  Wst 1 Wst 2  Wst 3 Wst 4 Totals Percentage Weighted Totals Weighted Totals LE1 LE2 LE3 LE4 LE5 Totals	6  1  3  2  1  13  100.0  1.6  12.5  Credits Available  4  1  1  NA  6  100.0  0.5  7.5  Credits Available  2  1  2  3  2  10	3  0  0  1 4 30.8 0.5 3.8  Best Value BREEAM Credits  3  0  NA 3 50.0 0.2 3.8  Best Value BREEAM Credits  1 1 2 2 2 2 8	1 1 1 1 1 0 4 30.8 0.5 3.8 0.5 3.8  Add-ons For Excellent 0 0 1 1 NA 1 16.7 0.1 1.3  Add-ons For Excellent 0 0 0 1 1 1 1.3	2 0 2 1 0 5 38.5 0.6 4.8 Unlikely Credits 1 1 0 NA 2 33.3 0.2 2.5 Unlikely Credits 1 0 0	It should be possible for all elements to be specified such that they achieve a Green Guide A rating. Previous experience suggests that several elements should achieve an A+ rating.  It should be feasible to achieve this rating  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback  Credit could be incorporated into Architectural design and spec as appropriate.  Comments  Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.  Design Implications BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN.  Comments required.  Need to ensure required area can be included in design (internally or externally)  NA  Comments  Based on Previous Arup comments for RHSC Based on Previous Arup comments for RHSC Based on Previous Arup comments for RHSC Based on Previous Arup comments for RHSC	Cost	Nightingale  Nightingale & Arup  Nightingale & Arup  Nightingale  Nightingale  Nightingale  Nightingale  Reference Design Stage Action  Nightingale  NHSL & Nightingale  NHSL & Nightingale  NA  Reference Design Stage Action  Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist Nightingale / Ecologist	Action  Architect & Civil  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect & Contractor  Architect  Ultimate Successful Bidder Action  NHSL & Architect  NA  Ultimate Successful Bidder Action  Architect / Ecologist Architect / Ecologist Architect / Ecologist Architect / Ecologist
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Project Title	H&K Project Reference	Date	Prepared by
RHSC/DCN	11276A	Oct-11	J McM

Pollution	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits	Comments	Cost Reference Design Stage Action	Ultimate Successful Bidder Action
Impact of Refrigerants	Pol 1	3	0	0	3	Low GWP refrigerants reduce efficiency of plant and may have a side effect of increased power consumption. Technologies are not sufficiently developed to specify for this major use.		
Nox Emissions	Pol 2	3	0	3	0	CHP contribution / displaced grid supplied electricity will reduce net Nox emissions. Calculations to be performed.	H&K	M&E Engineer Civil Engineer
Surface Water Run-off	Pol 3	5	4	0	1	Based on Previous Arup comments for RHSC	Arup	Civil Engineer
Reduction of Night Time Light Pollution	Pol 4	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate. Need to check there is no conflict with Man 8 Security	H&K	M&E Engineer
Noise Attenuation	Pol 5	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate	Nightingale	Architect
<u>'</u>	Totals	13	6	3	4			
	Percentage	100.0	46.2	23.1	30.8			

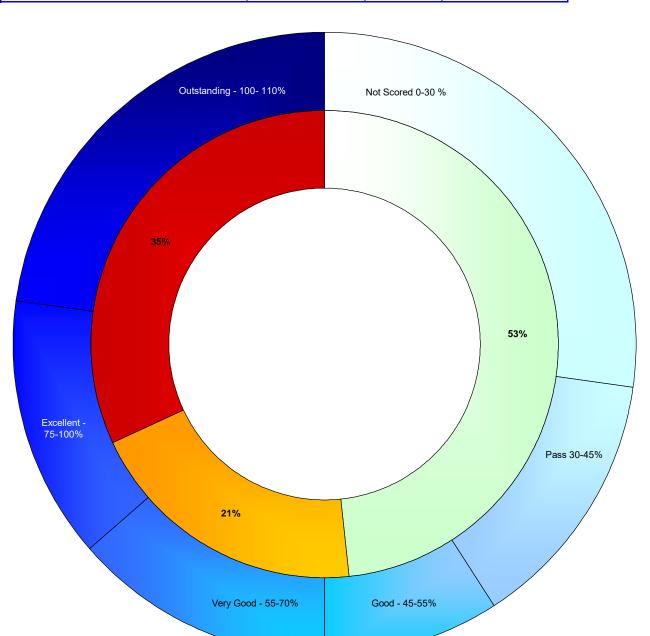
Innovation	Credit	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits
	lnn01	10	0	0	10
	Totals	10	0	0	10
	Percentage	100.0	0.0	0.0	100.0
	Weighted Totals	1.0	0.0	0.0	1.0
	Weighted Percentage	10.0	0.0	0.0	10.0

	Credits Available	Best Value BREEAM Credits	Add-ons For Excellent	Unlikely Credits
Total Weighted Score	17.4	8.8	3.2	5.4
Total Weighted Percentage	110.00	53%	21%	35%

Best Value BREEAM credits	These credits should be available as part of good practice design and generally benefit the overall design. They have been deemed Best Values credits  All compliant BREEAM evidence would need to be provided.	53.31%
Add-ons for Excellent	Achieving BREEAM Excellent is a challenge with any building type and in order to achieve the desired BREEAM rating the credits highlighted as Add-ons for Excellent have been targeted.	
Maximum Potential Score including Add-ons for Excellent	These targeted credits may have implications, such as; - Space Planning challenges, - Technical design challenges and/or - Additional costs - some may offer Bette value than others.  All Best Value BREEAM credits and Add-ons for Excellent credits would need to be achieved to ensure BREEAM excellent could be achieved at both Design and Procurement and Post Construction Review stages.	21.43%
Unlikely	These credits are deemed unobtainable / unlikely for the reasons detailed.	35.25%

Project Title	H&K Project Reference	Date	Prepared by
RHSC/DCN	11276A	Oct-11	J McM





## Potential BREEAM Scoring Illustration.

 Illustration Key
Best Value BREEAM Credits
Add-Ons for Excellent
Unlikely Credits

# Important Note:

Minimum credit standards for BREEAM Excellent have not been met.

The project has the potential to achieve a percentage score above the minimum level required for BREEAM Excellent, however as some credit minimum standards may not be met, a rating of Very Good would be awarded.

#### **Brady, Thomas**

 From:
 08 July 2011 16:01

 To:
 Brady, Thomas

Cc:

Subject: BREEAM Pre Assessment Checklist

Attachments: RHSC\_DCN BREEAM.pdf

Project 11276A: RHSC/DCN Reference Design

Our Ref: 11276A/EDI/OEML/0067

Tom

Please find attached below a copy of our BREEAM pre-assessment checklist for the combined RHSC/DCN building. Credits within the checklist are, at this stage, broken down into three categories;

- Best Value BREEAM credits Credits which form the basis of best practice design and which benefit the overall design with limited additional cost
- Add-ons for excellent credits Technically challenging credits above best practice design which have implications on project cost, procurement strategy and site space requirements.
- Unlikely credits Credits which are deemed unobtainable / unlikely for the reasons detailed

Each credit has been assigned to the relevant reference design team members and to the client, it should be noted that there are numerous design team and client driven credits which will require early action to ensure credits can be awarded. I have also included a second column entitled "ultimate Successful Bidder Action" to highlight that it will be the responsibility of the client and the eventual design team to ensure that credit criteria is met.

Please call if you wish to discuss the check list in further detail.

Reagrds

Jonathan

Jonathan McMillan

Hulley & Kirkwood Consulting Engineers The Stack Ground Floor Papermill Wynd McDonald Road Edinburgh EH7 4QL

.....Making Buildings Work

(See attached file: RHSC\_DCN BREEAM.pdf)

Please consider the environment before printing this email.

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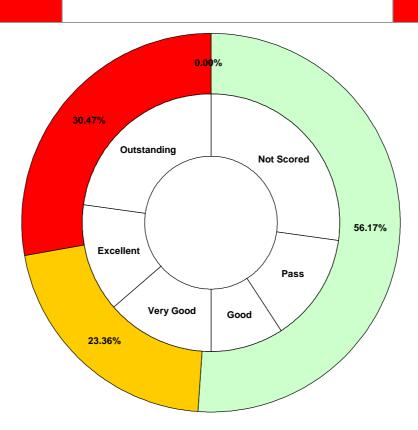
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H&K Job	RHSC/DCN	H&K Number	11276A
		Date	1st Jul 2011

#### **BREEAM Scoring Summary**

Best Value BREEAM credits	These credits should be available as part of good practice design and generally benefit the overall design. They have been deemed Best Values credits  All compliant BREEAM evidence would need to be provided.	56.17%
Add-ons for Excellent	Achieving BREEAM Excellent is a challenge with any building type and in order to achieve the desired BREEAM rating the credits highlighted as Addons for Excellent have been targeted.	23.36%
Maximum Potential Score including Add-ons for Excellent	These targeted credits may have implications, such as; - Space Planning challenges, - Technical design challenges and/or - Additional costs - some may offer bette value than others.  All Best Value BREEAM credits and Add-ons for Excellent credits would need to be achieved to ensure BREEAM Excellent could be achieved at both Design and Procurement and Post Construction Review stages.	
Unlikely	These credits are deemed unobtainable/unlikely for the reasons detailed.	30.47%



Management	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Man 1 Commissioning	2	2	0	0	Credit could be incorporated into Prelims and M&E spec as appropriate			H&K	M&E Engineer
Man 2 Considerate Constructors	2	2	0	0	Credit could be incorporated into Prelims as appropriate			NHSL and Architect and Contractor	NHSL and Architect and Contractor
Man 3 Construction Site Impacts	4	4	0	0	Credit could be incorporated into Prelims as appropriate			NHSL and Architect and Contractor	NHSL and Architect and Contractor
Man 4 Building user guide	1	1	0	0	Credit could be incorporated into Prelims as appropriate			NHSL and Design Team	NHSL and Design Team
Man 6 Consultation	2	0	2	0	Early action required BREEAM requirements are exacting and onerous - need to ensure that all can be met. BREEAM compliant consultation plan required			NHSL and Design Team	NHSL and Design Team
Man 8 Security	1	1	0	0	Early action required (Prior to Stage C) BREEAM requires evidence that the design team has consulted and sought advice form ALO with respect to Secured by Design.			NHSL and Architect	NHSL and Architect
Man 11 Ease of Maintenance	1	0	1	0	Design Team to assess "Ease of Maintenance" of the building and the building services and landscaping. Appropriate guidance documents and assessment tools must be used from concept design stage onward.			Design Team	Design Team
Man 12 Life Cycle Costing	2	1	1	0	Cost Consultant to provide. NHSL and Design Team will need to establish whether the results of the study could be implemented in the specification, design and final construction of the assessed building to allow the 2nd credit to be awarded			T&G	PQS
Man 13 Good Corporate Citizen	1	0	1	0	NHSL input required NHSL required to commit to Good Corporate Citizen - even although this may have a England and Wales bias (BREEAM makes no concessions)			NHSL	NHSL
	16	11	5	0		£0			
Section Weighting	12.00%					_	_		
One credit is worth =	0.75%	8.25%	3.75%	0.00%					

Health & Wellbeing	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Hea 1 Daylighting	2	0	0	2	Experience would suggest that this credit is unlikely due to the building type and the onerous BREEAM requirements. Daylighting however would be maximised where possible.				
Hea 2 View Out	2	0	0	2	Experience would suggest that this credit is unlikely due to the building type and the onerous BREEAM requirements. Views out however would be maximised where possible.				
Hea 3 Glare Control	1	0	1	0	NHSL input required  Need to understand whether internal blinds would constitute a risk for infection control - otherwise integrated blind (within window panes) would be required to achieve credit.			NHSL and Architect	NHSL and Architect & QS
Hea 4 High frequency lighting	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E Engineer
Hea 5 Internal and external lighting levels	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E Engineer
Hea 6 Lighting zones & controls	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E Engineer
Hea 7 Potential for natural ventilation	1	0	0	1	Experience would suggest that this credit is unlikely due to the building type and the onerous BREEAM requirements. Natural ventilation however would be maximised where possible.				
Hea 8 Indoor air quality	1	0	0	1	Experience would suggest that this credit is unlikely due to the building type and the onerous BREEAM requirements and 'land-locked' nature of proposed site and the proximity of car parking spaces to the building is deemed to be a potential source of pollution at openable windows.				
Hea 9 Volatile Organic Compounds	1	0	1	0	Credit could be incorporated into Architectural design and spec as appropriate. May have financial implications for Contractor?			Architect	Architect
Hea 10 Thermal comfort	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E Engineer
Hea 11 Thermal zoning	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E Engineer
Hea 12 Microbial contamination	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E Engineer
Hea 13 Acoustic Performance	2	1	0	1	Design Issue Need to understand any potential costs for pre-completion acoustic testing in line with HTM08-01 and BREEAM requirements and possible costs to undertake remedial works for any non-compliant spaces.  Cost allowances to be considered 1st credit - Enhanced control of Sound transfer, acoustic testing throughout. 2nd credit - Control of reverberation and acoustic testing.  With respect to Arups OBC Acoustic Design Report, October 2010 Oliver Atack suggested that whilst both credits are technically possibly, practically these may be difficult to achieve. (See11276/EDI/IEML/1802 and correspondence from Oliver Atack)	TGP to Advise		Architect	Architect
Hea 15 Outdoor space	1	0	1	0	May be difficult to achieve given 'land-locked' nature of proposed site. Architect would need to review BREEAM requirements and comment.			Architect	Architect
Hea 19 Arts in health	1	1	0	0	NHSL input required Requirements for Arts Coordinator to be appointed .	£5,000		NHSL	NHSL
	18	8	3	7		£5,000			
Section Weighting	15.00%						I		
One credit is worth =	0.83%	6.67%	2.50%	5.83%					

Energy	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Ene 1 Reduction of CO2 Emissions	15	6	2	7	Dependant on chosen Energy strategy.  Mandatory requirement for Excellent is 6 credits (EPC = 40).  Add-ons credits cannot be guaranteed, Reference Design SBEM model to be completed, followed by assessment of whether performance can realistically be improved.			H&K	M&E
Ene 2 Sub-metering - Substantial Energy	2	2	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E
Ene 3 Sub-metering high energy load / tenancy	1	0	1	0	Significant Design Implications Credit could be incorporated into M&E design and spec as appropriate. Requires extensive metering for all services	£50,000	Estimate of an additional 100 meters at say £500 each linked back to BMS would be required.	H&K	M&E
Ene 4 External Lighting	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate. Need to check there is no conflict with Man 8 Security			H&K	M&E Engineer
Ene 5 Low zero carbon technologies	3	3	0	0	Dependant on chosen Energy strategy.			H&K	M&E Engineer
Ene 8 Lifts	2	2	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E Engineer
Ene 15 Provision of Energy Efficient Equipment	1	0	1	0	NHSL input required Credit potential due to NHSL Sustainability Action Plan in Development			NHSL	NHSL
Ene 16 CHP Community Energy	1	1	0	0	Will be considered as part of Ene 5			H&K	M&E Engineer
	26	15	4	7		£50,000			
Section Weighting	19.00%	•					<u>.</u>		
One credit is worth =	0.73%	10.96%	2.92%	5.12%					

	Transport	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Tra 1	Provision of public transport	5	4	0	1	Based on understanding of site			NHSL and Architect	NHSL and Architect
Tra 2	Proximity to amenities	1	1	0	0	Design Issue Based on understanding of site and provision of dispensing pharmacy within RHCS/DCN			NHSL and Architect	NHSL and Architect
Tra 3	Cyclist Facilities	2	0	2	0	Design Issue Credit would need to be designed in to both internal and external space planning. Numbers would need to be rechecked for joint RHSC and DCN.  1st Credit Based on 500 building users - 50 + 18 cycle racks need to be provided based on 172 beds 68 BREEAM compliant cycle racks to be provided. Reduced by 50% for City Centre location (34 racks). N.B. Some racks can hold two bikes  2nd Credit Cost to be provided for two of the following compliant facilities must be provided for the building users: a. Compliant showers (1 per 10 racks = 4) b. Compliant changing facilities and lockers for clothes (1 per 10 racks = 4m2) c. Compliant drying space for wet clothes (compliant drying space)  Staff shower and changing facilities would have to be made available to the public or a separate facility built.	£100,000		NHSL and Architect	NHSL and Architect
Tra 4	Pedestrian and cycle safety	2	0	2	0	Design Issue BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.  Arups previously concerned that BREEAM required dedicated pedestrian crossing of a vehicle access route is provided, the road is raised to the pavement level (i.e. the pavement is not lowered to road level).  Unsure if this is possible?			Arups	Design Team
Tra 5	Travel plan	1	0	1	0	BREEAM Compliant Travel Plan required to help inform the design.			NHSL	NHSL
Tra 6	Maximum car parking capacity	1	0	1	0	Design Issue NHSL to confirm anticipated number of patients, staff and visitors. Architect to confirm number of car parking spaces to be included within the development.			NHSL and Architect	NHSL and Architect
Tra 7	Travel information point	1	1	0	0	Credit could be incorporated into Architectural and M&E design and spec as appropriate			H&K	M&E
Tra 8	Deliveries & manoeuvring	1	0	1	0	Design Issue BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.			Arups	Design Team
		14	6	7	1		£100,000			
	Section Weighting	8.00%								
	One credit is worth =	0.57%	3.43%	4.00%	0.57%					

Water	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Wat 1 Water Consumption	3	1	2	0	NHSL input required Refer to NHSL Sustainability Plan. Requirements for public areas include:  Taps have a maximum flow rate less than 6 litres/min for a water pressure of 0.3MPa and are one of the following types:  - Timed automatic shut-off taps e.g. push taps - Electronic sensor taps.  Also requirements for third credit would need to be reviewed.	£120,000	Suggest 800 sensor taps @ £150	NHSL and Architect	NHSL and Architect
Wat 2 Water meter	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E
Wat 3 Major leak detection	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			H&K	M&E
Wat 4 Sanitary supply shut off	1	0	1	0	Cost Implication vs. Real Benefit to NHSL Credit may not be possible due to proposed cold water system (Kemper or equivalent). BREEAM requires solenoid valves to be added to the water supply to each toilet (all WC's and Urinals). This also applies to any single bedroom ensuites.	£170,000	Solenoid valves added to all WC's and Urinal	NHSL& HK	NHSL & M&E
Wat 5 Water recycling	2	0	0	2	This is unlikely due to required tank storage size on restricted site. The credit is awarded for water harvesting and re-use of "grey" water e.g for WC flushing.				
Wat 6 Irrigation systems	1	1	0	0	Targeted in anticipation of limited planting and no requirement for dedicated irrigation system.			H&K	M&E
	9	4	3	2		£290,000			
Section Weighting	6.00%				'   		1		
One credit is worth =	0.67%	2.67%	2.00%	1.33%					

Materials	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Mat 1 Materials Specification	6	3	1	2	Difficult to guarantee early in design due to need to element areas and BREEAM green guide ratings. Conservative estimate assumed			Architect	Architect
Mat 2 Hard landscaping & boundary protection	1	0	1	0	Difficult to guarantee early in design due to need to element areas and BREEAM green guide ratings. Conservative estimate assumed			Architect and Civil	Architect and Civil
Mat 3 Re-use of building façade	1	0	0	1	Not achievable for new builds				
Mat 4 Re-use of building structure	1	0	0	1	Not achievable for new builds				
Mat 5 Responsible sourcing of materials	3	1	0	2	credit deemed likely based on BREEAM Assessor experience to date on similar projects     and industry feedback			Architect	Architect
Mat 6 Insulation	2	1	0	1	1 credit deemed likely based on BREEAM Assessor experience to date on similar projects and industry feedback			Architect	Architect
Mat 7 Designing For Robustness	1	1	0	0	Credit could be incorporated into Architectural design and spec as appropriate.			Architect	Architect
	15	6	2	7		£0			
Section Weighting	12.50%						-		
One credit is worth =	0.83%	5.00%	1.67%	5.83%					

Waste	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Wst 1 Construction Site Waste Management	4	3	1	0	Credit could be incorporated into Prelims as appropriate. Industry feedback could help guide			NHSL and Architect	Contractor
Wst 2 Recycled aggregates	1	0	0	1	Recycled aggregates will be specified for some uses but are not available locally to the required grade and in sufficient quantities for the high grade structural uses.				
Wst 3 Recyclable waste storage	1	0	1	0	Design Implications BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.  Need to ensure required area can be included in design (internally or externally)	£15,000	Creation of hard standing and enclosure for recycling bins say 70m2	NHSL and Architect	NHSL and Architect
Wst 4 Compactor / Baler	1	0	1	0	Design Implications BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.	£5,000	Hard standing for compactor (compactor procured by NHSL FM)	NHSL and Architect	NHSL and Architect
Wst 5 Composting	1	0	1	0	Design Implications BREEAM requirements may be difficult to achieve given site restrictions for revised RHCS/DCN. Comments required.			NHSL and Architect	NHSL and Architect
	8	3	4	1		£20,000			
Section Weighting	7.50%								
One credit is worth =	0.94%	2.81%	3.75%	0.94%					

Land Use & Ecology	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
LE 1 Re-use of land	1	1	0	0	Based on Previous Arup comments for RHSC			Architect / Ecologist	Architect / Ecologist
LE 2 Contaminated land	1	0	0	1	The site is not contaminated at the levels requiring remediation.			Architect / Ecologist	Architect / Ecologist
LE 3 Ecological value of site	1	1	0	0	Based on Previous Arup comments for RHSC			Architect / Ecologist	Architect / Ecologist
LE 4 Mitigating Ecological impact	2	2	0	0	Based on Previous Arup comments for RHSC			Architect / Ecologist	Architect / Ecologist
LE 5 Enhancing Site Ecology	3	2	0	1	Based on Previous Arup comments for RHSC			Architect / Ecologist	Architect / Ecologist
LE 6 Long term impact on biodiversity	2	2	0	0	Based on Previous Arup comments for RHSC			Architect / Ecologist	Architect / Ecologist
	10	8	0	2		£0			
Section Weighting	10.00%						_		
One credit is worth =	1.00%	8.00%	0.00%	2.00%					

Pollution	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Comments	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
Pol 1 Refrigerant GWP - Building services	1	0	0	1	Low GWP refrigerants reduce efficiency of plant and may have a side effect of increased power consumption. Technologies are not sufficiently developed to specify for this major use.				
Pol 2 Preventing refrigerant leaks	2	0	1	1	Understanding is that there is still a local of commercially available equipment than can allow this credit to be targeted. More feedback required from Manufactures.	£50,000	Can this be bought?	H&K	M&E
Pol 3 Refrigerant GWP - Cold storage	1	0	0	1	Low GWP refrigerants reduce efficiency of plant and may have a side effect of increased power consumption. Technologies are not sufficiently developed to specify for this major use.				
Pol 4 NOx emissions from heating source	3	3	0	0	Dependant on proposed Energy Strategy but CHP should score well.			H&K	M&E
Pol 5 Flood risk	3	1	0	2	Based on Previous Arup comments for RHSC			Arups	Civl
Pol 6 Minimising watercourse pollution	1	1	0	0	Based on Previous Arup comments for RHSC			Arups	CivI
Pol 7 Reduction of Night Time Light Pollution	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate. Need to check there is no conflict with Man 8 Security			H&K	M&E
Pol 8 Noise Attenuation	1	1	0	0	Credit could be incorporated into M&E design and spec as appropriate			Architect	Architect / Acoustician
	13	7	1	5		£50,000			
Section Weighting	10.00%								
One credit is worth =	0.77%	5.38%	0.77%	3.85%					

	Innovation Credits	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	Innovation Credits	Cost	Justification	Reference Design Stage Action	Ultimate Successful Bidder Action
	Innovation BREEAM Accredited Professional	2	2	0	0	RIBA Stage B action Based on early appointment of BREEAM accredited profession				
Man 2	Innovation Considerate Constructor	1	0	1	0	Considerate Contractors Score > 36 required. This could be written into Prelims but may be difficult to achieve given site restrictions for revised RHCS/DCN site. Comments required but possibility reduced due to DDA and site compound				DLL
Hea 1	Innovation Daylighting	1	0	0	1					
Ene 1	Innovation Reduction of CO2 Emissions	1	0	0	1					
Ene 5	Innovation Low zero carbon technologies	1	1	0	0					
Wat 2	Innovation Water meter	1	0	0	1	Extend on mains water supply withni the building to be determined. Kemper BCWS system may not be suitable for metering.	£10,000	Based on approx 15 departments estimate of an additional 20 meters at say £500 each linked back to BMS would be required.	н&к	M&E
Mat 1	Innovation Materials Specification	0.5	0	0	0.5	* See comment below for Innovation				
Mat 5	Innovation Responsible sourcing of materials	0.5	0	0	0.5	* See comment below for Innovation				
Wst 1	Innovation Construction Site Waste Management	1	0	0	1					
	Innovation	1	0	1	0	Innovation credit anticipated It is hoped that one innovation credit could be targeted for the proposed Kemper Domestic Cold Water system				H&K
		10	3	2	5	*A maximum of 10 credits are available under Innovation This is why Innovation credits for Mat 1 Materials Specification and Mat 5 Responsible sourcing of materials have been reduced to half a credit. As long as 10 credits are the maximum available this could be re-apportioned anywhere	£10,000			
	Section Weighting	10.00%								
	One credit is worth =	1.00%	3.00%	2.00%	5.00%					

Scoring Totals	Available Credits	Best Value BREEAM credits	Add-ons for Excellent	Unlikely	
Total Credits	139	71	31	37	Possible Add-ons for Excellent
Total Percentages	110.00%	56.17%	23.36%	30.47%	

#### **BREEAM Thresholds**

56.17%	Very Good	Best Value BREEAM score and rating
79.53%	Excellent	Maximum Potential Score including Add-ons for Excellent subject to NHSL and Design Team comments







#### **NHS Lothian**

Royal Hospital for Sick Children
& Department of Clinical Neurosciences
Reference Design Stage
BREEAM 2008/2011 Comparison and Project
Implications

**July 2011** 

#### **Hulley & Kirkwood Consulting Engineers Ltd**

The Stack

**Ground Floor** 

Papermill Wynd

McDonald Road

Edinburgh

EH7 4QL

(t): +44(0) 131 558 4888 (f): +44(0) 131 558 4889

(e): hk.edinburgh@hulley.co.uk

(w): www.hulley.co.uk

.....Making Buildings Work

Prepared By: Jonathan McMillan Authorised By: Michael O'Donnell

Revision: -

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# NHS Lothian Royal Hospital for Sick Children & Department of Clinical Neurosciences Reference Design Stage BREEAM 2008/2011 Comparison and Project Implications

**July 2011** 

REV	DESCRIPTION	PREPARED BY	DATE
Issue No. 1	First Issue	Jonathan McMillan	15-7-2011

## NHS Lothian Royal Hospital for Sick Children & Department of Clinical Neurosciences Reference Design Stage BREEAM 2008/2011Comparison and Project Implications

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#### 1.0 Introduction:

This Report has been prepared by Jonathan McMillan for Hulley ECO, a sustainable building design and building simulation division within Hulley & Kirkwood Ltd. Jonathan has the following qualifications relative to sustainable building design and building simulation;

- MEng (Hons). in Mechanical Engineering The University of Edinburgh
- BRE Approved Certifier of Design for Section 6 Compliance
- Integrated Environmental Solutions (IES) accreditation covering Section 6
  Compliance for building types 3, 4 & 5 and for preparation of Energy
  Performance Certificates.
- BRE ISBEM software qualification
- CIBSE Low Carbon Consultant Simulation Specialist
- CIBSE Low Carbon Consultant Building Design Specialist
- Licensed BREEAM Assessor Health Care

#### 1.1 Report Scope

Following the BREEAM 2011 scheme going live on 1st July 2011, Hulley & Kirkwood have been requested to prepare a short report highlighting the key differences between the previous BREEAM 2008 and new 2011 assessment methods.

The original Royal Hospital for Sick Children (RHSC) only scheme was registered under the BREEAM 2008 assessment method by Hulley & Kirkwood in February 2010. A preassessment checklist was issued and the design team set in motion a plan of action to achieve a BREEAM excellent rating under the 2008 scheme.

Following the alteration to the project to include the Department of Clinical Neurosciences (DCN) Hulley & Kirkwood were able to retain the registration number for project and, as a result, are currently able to assess the combined RHSC/DCN building under the BREEAM 2008 assessment method.

The project registration number is transferable, and following the completion of the Reference Design stage, the project could continue to be assessed under the BREEAM 2008 assessment method. However, if the project reference number is not transferred the project will have to be re-registered under the current BREEAM 2011 assessment method.

The intention of this report is to highlight the differences between the BREEAM 2008 scheme and its replacement, the new BREEAM 2011 scheme, and to identify any key risk areas which may result in further costs associated with aiming to achieve a BREEAM Excellent rating, if the 2011 assessment was employed instead of the 2008 assessment.

It should be noted that this document is not intended as an exhaustive list of every difference between the BREEAM 2008 and 2011 assessment methods.

#### 1.2 Executive Summary

Hulley & Kirkwood have already prepared and circulated a reference design stage BREEAM 2008 pre-assessment check list for the current RHSC/DCN building which illustrates the actions required to achieve a BREEAM Excellent rating. This is one of the reference design agreed deliverables.

Credits within the checklist have been broken down into three categories

- **Best Value BREEAM credits** Credits which form the basis of best practice design and which benefit the overall design with limited additional cost
- Add-ons for excellent credits Technically challenging credits above best practice design which have implications on project cost, procurement strategy and site space requirements.
- Unlikely credits Credits which are deemed unobtainable / unlikely for the reasons detailed

It was determined that a BREEAM Excellent rating was achievable in principle with input from the Reference Stage design team and the subsequent successful bidder design team. It was determined that a maximum potential score of **79.53%** was achievable, with 56.17% being attributed to "Best Value BREEAM credits" and 23.16% being attributed to "Add-ons for BREEAM Excellent".

Subsequent to the issue of this checklist Hulley & Kirkwood have compared the 2008 and 2011 BREEAM assessment methods on a credit by credit basis and have compiled an equivalent scoring for the project under the 2011 assessment method. The results of this comparison can be seen in table 1.2 below. The comparison demonstrates that the maximum potential score under the 2011 assessment method is significantly lower than that under the 2008 assessment method. Results highlight that, if the project is to be assessed under the 2011 assessment method, there is a clear need to target additional credits to ensure a score above 70%, (required for Excellent), is achieved.

Credit Type	Description	BREEAM 2008 Score	BREEAM 2011 Score
Best Value BREEAM credits	Credits which form the basis of best practice design and which benefit the overall design with limited additional cost	56.17%	51.97%
Add-ons for excellent credits	Technically challenging credits above best practice design which have implications on project cost, procurement strategy and site space requirements	23.36%	17.74%
Unlikely credits	Credits which are deemed unobtainable / unlikely for the reasons detailed	20.47%	30.29%
Maximum Potential Score	Maximum Potential Score including Add-ons for Excellent	79.53%	69.71% (A drop of 9.82%)
	BREEAM Excellent Rating Achieved (70% Required)	Yes	No

Table 1.2.1 Comparison of Potential Scoring between BREEAM 2008 and 2011 Assessment Methods

#### 1.3 Risk areas associated with minimum credit standards

In addition to compiling a comparison of maximum potential scoring for the two assessment methods Hulley & Kirkwood have identified the following high risk areas associated with achieving a BREEAM Excellent rating under the 2011 assessment method.

#### § Ene 01: Reduction of CO2 emissions

In order to achieve a BREEAM excellent rating a project must score at least six credits in the ENE01 section. In order to achieve six credits the building  $CO_2$  emission rate must be reduced to a level representing a 25% improvement on the current 2010 Building Regulations, ie achieve a Building  $CO_2$  emission rate (BER) which is 25% less than the Target  $CO_2$  Emission Rate (TER). This reduction represents a total reduction in  $CO_2$  emissions of 70% relative to the notional building. It should be noted that this is an extremely onerous target and is likely to incur significant design and cost implications even if it were possible for a heavily serviced acute hospital building given the current carbon emission factors associated with grid supplied electricity.

Table 1.2.2 below provides a comparison of the Notional, Target and building emission rates in addition to the emission rate required for BREEAM Excellent.

2010 BER	2010 Section 6	RHSC/DCN	BREEAM 2011
	58% reduction in CO2 Emissions	Reference Design Stage	ENE 01. 6 Credits Requirement for Excellent Rating
	relative to 2010 Notional Building	Anticipated CO2 Emissions	25% further reduction in CO2 Emissions above TER
			Equivalent to a 70% reduction in NER
85kg.CO2/m2/annum	36kg.CO2/m2/annum	TBC kg.CO2/m2/annum	27kg.CO2/m2/annum
2010	2010	RHSC/DCN	BREEAM 2011
Notional Building	Target Building	Reference Design Stage	
CO <sub>2</sub> Emission Rate	CO <sub>2</sub> Emission Rate	CO <sub>2</sub> Emission Rate	CO <sub>2</sub> Emission Rate

Table 1.2.2 2010 CO2 Emission Rate Targets

#### § Wat 01: Water consumption

In order to achieve a BREEAM excellent rating a project must score at least one credit in the WAT01 section. In order to achieve this it must be demonstrated that the building can reduce its water consumption by approximately 12.5%. This will be difficult to achieve for a heavily serviced acute hospital building without additional water saving / recycling equipment. This may for instance include UV filtration technology for a rainwater harvesting scheme, which would require significant extra site space for underground water storage.

#### 1.4 Concluding remarks

- § If assessed under the 2011 scheme the project will be at risk of not achieving the desired BREEAM Excellent rating.
- § A like for Like comparison has highlighted that the current level of credit compliance anticipated for the 2008 assessment method will be insufficient to achieve the minimum percentage scoring level of 70% under the 2011 assessment method required to achieve BREEAM excellent.
- § There is additional risk associated with the minimum standard credits required for BREEAM Excellent. The greatest of these is ENE01 Reduction of CO2 emissions. This required CO2 emission reduction associated with this credit represents a total reduction in CO2 emissions of 70% relative to the notional building. It should be noted that this is an extremely onerous target and is likely to incur significant design and cost implications. even if it were possible for a heavily serviced acute hospital building given the current carbon emission factors associated with grid supplied electricity.

#### 2.0 Changes within BREEAM 2011

To maintain a flexible system BREEAM 2011 retains the balanced approach to the assessment and rating of building performance. This means that, to achieve a particular level of performance the majority of BREEAM credits can be traded, i.e. non-compliance in one area can be off-set through compliance in another to achieve the target BREEAM rating.

However, as per the 2008 assessment method, to ensure that performance against fundamental environmental issues is not over-looked in pursuit of a particular rating, BREEAM 2011 retains minimum standards of performance in key areas e.g. energy, water, waste etc. It is important to bear in mind that these are minimum acceptable levels of performance and, in that respect they should not necessarily be viewed as levels that are representative of best practice for a BREEAM rating level.

To achieve a BREEAM Excellent rating the minimum overall percentage score of 70% must be achieved and the minimum standards, detailed in Table 2.1 below and overleaf must also be achieved.

Credit	Minimum Scoring required for Excellent	HK Comment	
Man 01: Sustainable procurement	One credit	Equivalent to 2008 Assessment method. No additional risk	
Man 02: Responsible construction practices	One credit	Equivalent to 2008 Assessment method. No additional risk	
Man 04: Stakeholder participation	One credit	Building user information required  Equivalent to 2008 Assessment method.  No additional risk	
Hea 01: Visual comfort	One credit	Equivalent to 2008 Assessment method. No additional risk	
Hea 04: Water quality	One credit	Equivalent to 2008 Assessment method. No additional risk	
Ene 01: Reduction of CO2 emissions	Six credits	BREEAM Excellent level (≥6 credits): Requires a CO2 parameter for the EPRNC calculation of 0.22. This is equivalent to a 25% improvement on the TER.  Additional Risk.	
Ene 02: Energy monitoring	One credit (First sub-metering credit)	Equivalent to 2008 Assessment method. No additional risk	
Ene 04: Low or zero carbon technologies	One credit	Equivalent to 2008 Assessment method. No additional risk	

Table 2.1 continued.....

Wat 01: Water consumption	One credit	The water consumption (litres/person/day) for the assessed building is compared against a notional baseline performance and a minimum 12.5% improvement is required  Additional Risk.	
Wat 02: Water monitoring	Criterion 1 only	Water meter required on incoming water main (regardless of water source)  Equivalent to 2008 Assessment method. No additional risk	
Mat 03: Responsible Sourcing	Criterion 3 only	All timber must be sourced in accordance with the UK Government Timber Procurement Policy  Equivalent to 2008 Assessment method. No additional risk	
Wst 03: Operational waste	One credit	Equivalent to 2008 Assessment method. No additional risk	
LE 03: Mitigating ecological impact	One credit	Equivalent to 2008 Assessment method. No additional risk	

**Table 2.1 Minimum Excellent Rating Requirements** 

The following section provide a brief summary of the changes to individual credits

#### 2.1 Management

#### Man 01 - Sustainable procurement

This section is comprised of BREEAM 2008 sections;

- Man 1: Commissioning 2 credits, as previously
- Innovation credit: BREEAM AP Now increased to 3 credits, with the first credit now split into 2 credits and the second credit remaining the same.

In addition there are new credits as follows;

- 1 credit for post construction thermo-graphic survey and remedial works where required
- 1 credit for a defined decision making process (to include the design team, contractor and occupier); agreed roles / responsibilities and schedule of training for building manager(s).
- 1 credit for post occupancy monitoring to collect energy & water data for 12 months post occupation and 'aftercare support'.

#### Man 02 - Responsible construction practices

This section is comprised of BREEAM 2008 section Man 2: Considerate Constructors and is worth 2 credits, as previously assessed under BREEAM 2008

#### Man 03 - Construction site impacts

This section takes a number of the BREEAM 2008 Man 3 sections and awards credits as follows;

- 1 credit for site energy targeting, monitoring and reporting (an enhancement of 2008 Man 3 item a)
- 1 credit for site water targeting, monitoring and reporting (an enhancement of 2008 Man 3 itemc)
- 1 credit for site transport monitoring and reporting an enhancement of 2008 Man 3 item
   b)
- 1 credit for sourcing sustainable site timber (similar to 2008 Man 3 timber credit)
- 1 credit for construction site management (EMS & pollution management similar to 2008 Man 3 items d, e & g)Man 04 Stakeholder participation

This section is comprised of BREEAM 2008 sections;

- Man 4: Building user guide 1 credit, as previously
- Man 6: Consultation 1 credit, for covering the requirements of both 2008 credits and now also applies to commercial buildings. For schools this also now includes some elements of 2008 credit LE7.

In addition there are new credits as follows;

- 1 credit for ensuring building accessibility, this contains some of the 2008 Man 7 credit requirements
- 1 credit for carrying out Post Occupancy Evaluation

#### Man 05 - Life cycle cost and service life planning

This section is comprised of BREEAM 2008 section Man 12 – Life cycle costing which is now increased to 3 credits, with the first credit now split into 2 credits and the second credit remaining the same.

#### 2.2 Health & Wellbeing

#### Hea 01 - Visual comfort

This section is comprised of BREEAM 2008 sections;

- Hea 4: High frequency lighting No credit value, but a minimum requirement for all rating levels
- Hea 1: Daylighting 1 -2 credits, depending on building type
- Hea 2: View out and Hea 3: Glare control Generally 1 credit, for both sections (2 credits for some healthcare buildings)
- Hea 5: Internal & external lighting levels and Hea 6: Lighting zones & controls 1 credit, for both sections
- Hea 19: Arts in health 1 credit, for healthcare only

#### Hea 02 - Indoor air quality

This section is comprised of BREEAM 2008 sections;

- Hea 7: Potential for natural ventilation 1 credit, as previously
- Hea 8: Internal air pollution 1 credit, as previously
- Hea 9: Volatile organic compounds 1 credit, as previously
- Hea 17: Specification of laboratory fume cupboards and Hea 18: Containment Level 2 & 3 laboratory areas - 1 credit, for both sections (only applicable where labs within the building)

In addition there is a new credit as follows;

• 1 credit for pre-occupancy VOC testing

#### Hea 03 - Thermal comfort

This section is comprised of BREEAM 2008 sections;

- Hea 10: Thermal comfort 1 credit, as previously assessed under BREEAM 2008
- Man 11: Thermal zoning 1 credit, as previously assessed under BREEAM 2008

#### Hea 04 - Water quality

This section is comprised of BREEAM 2008 sections Hea 12: Prevention of legionella and Hea 16; Drinking water worth 1 credit, for both sections

#### Hea 05 - Acoustic performance

This section is comprised of BREEAM 2008 section Hea 13: Acoustic performance worth 1 - 3 credits, as previously assessed under the 2008 scheme.

#### Hea 06 - Safety & security

This section is comprised of BREEAM 2008 sections;

- Man 8: Security 1 credit, as previously and now also applies to commercial buildings
- Tra 4: Pedestrian & cyclist safety & Tra 8: Deliveries and Manoeuvring Now 1 credit for both sections, all building types

#### 2.3 Energy

#### Ene 01 – Reduction of CO2 emissions

Minimum standard requirements – 6 credits required for Excellent rating. A 25% reduction relative to the building TER is required in order to achieve a BREEAM Excellent rating.

This section is comprised of BREEAM 2008 section Ene 1:Reduction in CO2 emissions and is still worth 15 credits available with the top score still awarded for zero net CO2, however there is a new calculation method based on the TER from Part L BRUKL calculations rather than the EPC used for BREEAM 2008. At this stage it is difficult to be clear on what impact this is likely to have on scoring as the Ene 1 BREEAM calculator is not yet available.

#### Ene 02 - Energy monitoring

Minimum standard requirements;

This section is comprised of BREEAM 2008 sections;

- Ene 2: Sub-metering of major energy uses now 1 credit, for all building types and no specific requirement for BEMS for healthcare buildings.
- Ene 3: Sub-metering of tenancy areas 1 credit, as previously (except schools)

#### Ene 03 – External lighting

This section is comprised of BREEAM 2008 section Ene 4: External lighting worth 1 credit, as previously

#### Ene 04 – Low & zero carbon technologies

This section is comprised of BREEAM 2008 sections;

- Ene 5: Low and zero carbon technologies 1 credit for feasibility study or green tariff in addition 1 further credit for 10% renewable energy
- Innovation credit: Ene 5 1 credit for 20% renewable energy (rather than the previous 15% under Ene 5)
- Ene 10: Free cooling 1 credit, as previously but now for all building types

In addition there is a new credit as follows;

• 1 credit where the feasibility study also includes an LCA of the carbon impact of the chosen LZC system(s) and this results in a lifecycle reduction in CO2 emissions

#### Ene 06 – Energy efficient transportation systems

This section is comprised of BREEAM 2008 sections Ene 8: Lifts and Ene 9: Escalators and travelling walkways and is worth 2 credits. The first credit covers a transport analysis and system selection, the second covers specification of energy efficient features (both credits now cover lifts and escalators).

#### 2.4 Transport

#### Tra 01 - Public transport accessibility

This section is comprised of BREEAM 2008 section Tra 1: Provision of public transport and is worth 2 – 5 credits, as previously (3 for offices & schools, 5 credits most other schemes).

Additionally, there is now also the option to get a maximum of 1 credit for buildings with a fixed shift pattern where a dedicated bus service is provided for building users. This is only available where no credits are achievable for scheduled public transport services.

#### Tra 02 - Proximity to amenities

This section is comprised of BREEAM 2008 section Tra 2: Proximity to amenities and is worth 1 credit for most schemes, with 2 credits available for Multi-Residential.

#### Tra 03 - Cyclist facilities

This section is comprised of BREEAM 2008 section Tra 3: Cyclist facilities and is worth 2 credits for most schemes. It is now possible to reduce cycle facilities by 50% if at least half the available Tra 1 credits have been achieved.

#### Tra 04 - Maximum car parking capacity

This section is comprised of BREEAM 2008 section Tra 6: Maximum car parking capacity and is worth 1 credit only for Healthcare

#### Tra 05 - Travel plan

This section is comprised of BREEAM 2008 section Tra 5: Travel plan and is still worth 1 credit.

#### 2.5 Water

#### Wat 01 - Water consumption

This section combines BREEAM 2008 sections Wat 1: Water consumption and Wat 5: Water recycling and is now worth 5 credits. There is a new calculation method for all building types based on percentage improvement over a baseline of 'standard' sanitary fitting.

As the Wat 1 BREEAM calculator is not yet available is it is difficult to judge scoring impact at present.

#### Wat 02 - Water monitoring

This section combines BREEAM 2008 sections Wat 2: Water meter and Innovation credit: Wat 2 (where relevant) with 1 credit available for both sections.

#### Wat 03 - Leak detection

This section is comprised of BREEAM 2008 sections;

- Wat 3: Major leak detection 1 credit, as previously assessed under BREEAM 2008
- Wat 4: Sanitary supply shut off 1 credit, as previously assessed under BREEAM 2008

#### Wat 04 - Water efficient equipment

1 credit - all schemes, although may be filtered out if not relevant to building

This section is comprised of BREEAM 2008 sections Wat 6: Irrigation system and Wat 7: Vehicle wash and is now worth 1 credit for both sections.

#### 2.6 Materials

#### Mat 01 – Life cycle impacts

This section is comprised of BREEAM 2008 section Mat 1: This is equivalent to the 2008 scheme.

#### Mat 02 - Hard landscaping and boundary protection

This section is comprised of BREEAM 2008 section Mat 2: Hard landscaping and boundary protection and is still worth 1 credit.

#### Mat 03 - Responsible sourcing of materials

This section is comprised of BREEAM 2008 section Mat 5: Responsible sourcing of materials and is still worth 3 credits.

#### Mat 04 - Insulation

This section is comprised of BREEAM 2008 section Mat 6: Insulation and is still worth 2 credits.

#### Mat 05 – Designing for robustness

This section is comprised of BREEAM 2008 section Mat 7: Designing for robustness and is still worth 1 credit.

#### 2.7 Waste

#### Wst 01 - Construction site waste management

This section is comprised of BREEAM 2008 section Wst 1: Construction site waste management and is still worth 4 credits although waste benchmarks have been revised slightly.

#### Wst 02 - Recycled aggregates

This section is comprised of BREEAM 2008 section Wst 2: Recycled aggregate and is still worth 1 credit but now includes recycled aggregate targets for individual building elements.

#### Wst 03 - Operational waste

This section is comprised of BREEAM 2008 sections Wst 3: Recyclable waste storage, Wst 4: Compactor/baler and Wst 5: Composting and is now worth 1 credit for all sections (as relevant).

#### Wst 04 - Speculative floor & ceiling finishes

This section is comprised of BREEAM 2008 section Wst 6: Floor finishes and is still worth 1 credit but has now been extended to include ceilings.

#### 2.8 Land Use & Ecology

#### LE 01 - Site selection

This section is comprised of BREEAM 2008 sections;

- LE 1: Reuse of land 1 credit, as previously assessed under BREEAM 2008
- LE 2: Contaminated land 1 credit, as previously assessed under BREEAM 2008

#### LE 02 – Ecological value of site and protection of ecological features

This section is comprised of BREEAM 2008 section LE 3: Ecological value of site and protection of ecological features and is still worth 1 credit.

#### LE 03 – Mitigating ecological impact

This section is comprised of BREEAM 2008 section LE 4: Mitigating ecological impact and is still worth 2 credits but uses revised habitat types.

#### LE 04 - Enhancing site ecology

This section is comprised of BREEAM 2008 section LE 5: Enhancing site ecology and is still worth 3 credits but uses revised habitat types.

#### LE 05 – Long term impact on biodiversity

This section is comprised of BREEAM 2008 section LE 6: Long term impact on biodiversity and is still worth 2 credits. Note this now includes the requirements of 2008 credit LE8 as an additional item for school assessments.

#### 2.9 Pollution

#### Pol 01 - Impact of refrigerants

This section is comprised of BREEAM 2008 section;

 Pol 2: Refrigerant leak detection – Now 1 credit only for both leak detection and pump down

In addition there are new credits as follows;

- 1 credit where refrigerants have a direct effect life cycle CO2 equivalent of ≤ 1000 kgCO2e/kW cooling capacity
- 1 further credit where refrigerants have a direct effect life cycle CO2 equivalent of ≤ 100 kgCO2e/kW cooling capacity or GWP ≤10 (this would be met by achieving 2008 section Pol 1).

#### Pol 02 - NOx emissions

This section is comprised of BREEAM 2008 section Pol 4: NOx emissions and is still worth 3 credits.

#### Pol 03 - Surface water run-off

5 credits - all schemes

This section is comprised of BREEAM 2008 sections;

- Pol 5: Flood risk 3 credits, as previously
- Pol 6: Minimising watercourse pollution 1 credit, as previously assessed under BREEAM 2008

In addition there is a new credit as follows;

1 credit for additional attenuation of surface water run-off to ensure that local flooding will
not occur in the event of local drainage system failure. This is in line with the
requirements of the Code for Sustainable Homes.

#### Pol 04 - Reduction of night time light pollution

This section is comprised of BREEAM 2008 section Pol 7: Reduction of night time light pollution and is still worth 1 credit.

#### Pol 05 - Noise attenuation

This section is comprised of BREEAM 2008 section Pol 8: Noise attenuation and is still worth 1 credit.

#### 2.10 Innovation

#### Man 01 - Sustainable procurement

1 credit for a 3 year commitment to monitor energy, water and occupancy satisfaction

#### Man 02 - Responsible construction practices

1 credit as 2008 Man 2 innovation credit.

#### Hea 01 - Visual comfort

1 credit as 2008 Hea 1 innovation credit.

#### Ene 01 - Reduction of CO2 emissions

Increased to 5 credits for a 'carbon negative' building

#### Ene 04 - Low or zero carbon technologies

1 credit for a 30% reduction in CO2 emissions as a result of specifying local LZC technologies

#### Wat 01 – Water consumption

1 credit for 65% improvement over benchmark

#### Mat 01 - Life cycle impacts

1 credit as 2008 Mat 1 innovation credit

#### Mat 03 – Responsible sourcing of materials

1 credit as 2008 Mat 5 innovation credit

#### Wst 01 - Construction site waste management

1 credit as 2008 Wst 1 innovation credit but now must <u>also</u> meet highest waste benchmark as well.

### RHSC and DCN at Little France Bidders' Day 13 December 2012

#### Tim Davison, Chief Executive, NHS Lothian

Welcome and introduction - Slides 1 to 4

- Thank everyone for coming
- Important project for Lothian and Scotland
- The first major NPD health project
- Commitment to improving the quality and standards of care and meeting the needs of our changing population
- This project is a significant step in shaping future care in Lothian by bringing children's, maternity and adult services together on the same site
- Creating a centre of excellence and a major trauma centre
- Extensive lists of benefits, in particular allowing our teams to share experience and expertise
- Proximity to the University of Edinburgh and the BioQuarter bringing research to the bedside
- Looking for a private sector partner who shares our commitment to quality and patient care
- Programme:
  - Susan Goldsmith, Director of Finance to provide overview of the project
  - Peter Reekie, Director of Finance, Scottish Futures Trust insight into the wider NPD pipeline and
  - Brian Currie, Project Director, to provide you with more detail on the project, the reference design and the procurement process.

#### Susan Goldsmith, Director of Finance, NHS Lothian

Overview - Slides 5 - 20

#### Slide 5 - overview

- Overview of how we got to this point
- Putting the project into the wider context of NHS Lothian
- Commitment to safe, effective, person centered care.

#### Slide 6 – second largest

- NHS Lothian created in 2001 as an umbrella organisation
- Tasked with breaking down the artificial barriers that had existed between the former health authority and the region's three former NHS trusts
- Single system approach providing coordinated care, working in partnership with local authorities
- The second largest health board in Scotland and a regional centre providing tertiary care for patients from across the south and east of Scotland.

#### Slide 7 – population

NHS Lothian serves a growing population of almost 850,000.

#### Slide 8 – primary care

82% of the population will visit their GP or practice nurse each year

#### Slide 9 – A&E

We have one of the busiest emergency departments in the UK, seeing almost 250,000 people each year.

#### Slide 10 – acute care

Around 200,000 people use our acute hospital services.

#### Slide 11 – maternity

Our maternity unit, the Simpson Centre for Reproductive Health, is the busiest in Scotland with around 6,500 births a year. We have the skills and facilities to respond to very complex births and to care for the most unwell neonates.

#### Slide 12 - staff

We have 24,000 staff across the region many of whom are highly skilled in specialist care.

#### Slide 13 - RHSC

- Historic and much loved 150 year old institution
- Based at its current city centre location for almost 120 years
- Site of many medical advances, leading the way in paediatric surgery from late 1800's to pioneering key-hole surgery in children at the end of the 20<sup>th</sup> century
- Provides one of Scotland's two Paediatric Intensive Care Units
- Service development constrained by the age and restrictions of the building
- Families and staff will be sad to leave but recognise the need for a new building that is designed for the healthcare of today and tomorrow.

#### Slide 14 - DCN

- Based at the Western General Hospital
- Provides specialist neurological care for people from across the south and east of Scotland
- Current DCN, built more than 50 years ago, bringing together neurology, neurosurgery, interventional neuroradiology into a single service
- Also pioneering unique theatre design was considered world leading
- Tradition we are keen to continue with the new development.

#### Slide 15 - CAMHS

- Regional centre for child and adolescent mental health currently based at the Royal Edinburgh Hospital which is home to a range of mental health services.
- Caring for young minds
- Move recognises need to provide physical and psychological care at the same time.

#### Slide 16 – We need this building.....

- Bringing together maternity, children's and adult services on the same site
   new born babies requiring an operation will no longer need an ambulance transfer across the city
  - significant benefits both in sharing technology, experience and expertise
- Providing modern healthcare in modern facilities that meet national guidelines – national policy for Paediatric Intensive Care Unit sited at two hospitals for children and young people.
- Creating a major trauma centre providing surgical specialities on the same site, for example neurosurgery and orthopedics, and again reducing the need for emergency transfers
- Providing age appropriate facilities in welcoming and therapeutic spaces looking for an innovative building that can address the varying needs of all those who will be using it and ensure a positive environment for our staff to work in.

#### Slide 17 – our new building will....

- Open in 2017
- Have 233 beds and 9 theatres
- Be easy to navigate patient flows needs to be clear to help limit waiting and transfer times and to reduce additional stress and anxiety
- Have a welcoming external landscape and provide appropriate and discrete environments for patients - each distinct service should have its

- own identity within this integrated clinical facility, in which the safety of all users is paramount
- Create a long term partnership with our NPD partner looking for a
  positive working relationship with joint goals that put the patient at the
  centre
- Build on our partnership working with the University of Edinburgh and the BioQuarter – develop further opportunities for research and learning.

#### Slide 18 - involving people

- Significant engagement and consultation up to this point
- Patient fora including:
  - DCN patient reference group
  - RHSC Family Council
  - Young People's group
- Clinical and support staff been involved through out
- All actively involved in shaping the reference design based on redesigned pathways of care
- Stakeholder project board has been established to keep these and other interested parties informed and this will continue to meet until the project is completed.

#### Slide 19 - Affordability

- In approving the outline business case SG Health and Social Care directorate confirmed terms for financial support
- Board confident that these terms can be satisfied and that this will be managed through financial planning process with revenue funding from SG and support from other NHS health boards and partners
- The project will be fully financed by the successful NPD partner inclusive of design, construction and maintenance
- However, the Board reserves the right to consider alternative financing and or contractual arrangements

 Development will be home to a number of national speciality services and will received revenue support from NHSScotland and other health boards.

#### Slide 20 – key milestones

- Getting to this point has taken a number of years and the project has developed during this process
- This has allowed the investment of significant time and energy in a reference design that meets our clinical needs and incorporates our aspirations for age appropriate spaces in a combined facility
- The design as it stands was granted planning permission in principle by the City of Edinburgh Council in April.
- In order to achieve our preferred option and for the project to go ahead on the site in front of us, changes have been required to the original PFI agreement for the Royal Infirmary of Edinburgh. These were agreed in the summer
- Project only progressed to OJEU once SFT completed the comprehensive key stage review. SFT have also scrutinised invitation to tender documentation.

Peter Reekie, Scottish Futures Trust to set the project in the context of the wider NPD programme. Slides 21 - 26.

#### **Brian Currie, Project Director**

The Project – Slides 27 – 49 Slide 27 – The Project

- Almost unique in the UK, as far as we know, where the intention is to develop a new NPD/PPP hospital within an existing PFI hospital and campus.
- Determined to normalise this situation and provide a site and Project and an opportunity which does not present challenges beyond what would be typically expected.

- Prior to going to market.
- Reached that point evidenced by our compliance with a rigorous governance process both internally and externally to the Board.

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

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

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

#### Slide 28 – Wider site

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

#### Slides 29 & 30 - The site

- "normalisation" process determined to create equal opportunity for all bidders to compete on a "level playing field".
- proposition where no one bidder is either advantaged or disadvantaged has been achieved - by specifying that although there will be a physical link between the new facility and the RIE at ground and first floor levels, in

- all other respects the development will be delivered as a standalone new build facility.
- links, driven by necessity, will ensure clinical functionality and efficiencies, particularly between the emergency departments, theatres and critical care departments on site.
- minor operational links between the new facility and the RIE in respect of connecting services mainly in terms of infrastructure associated with ICT, pneumatic tube system and fire alarm systems.
- in all other respects the facility is fully autonomous with a dedicated energy centre, standby power generation and FM goods yard. Public utilities are also independent of the existing RIE PFI facility.

# Slides 31-36 - Enabling Works

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

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

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

#### Slide 37 – Clinical enabling

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

#### Slide 38 – Interface Works

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

# Slide 39 - Reference design

To clarify what we really mean by a Reference Design.

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

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

# Slide 40 – Ground Floor site plan

A glass half full (not half empty)

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

# Mandatory Requirements

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

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

#### Compulsory Requirements

- Planning in Principle as granted by The City of Edinburgh Council.
- Interface, access/egress and infrastructure provisions enshrined in (SA6 + SA Enabling)

Clinical, D+C and FM Output Specs.

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

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

## Operational Functionality means:

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

#### Slide 41 - sections

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

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

#### Room Data Sheets

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

- General Requirements
- Clinical Output Spec

- Environmental Matrix
- Schedule of Operational/Design Notes
- Equipment Schedule
- Schedule of Accommodation
- Operational Functionality elements of the Reference Design

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

#### Schedule of Accommodation

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

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

Slide 42 – Stacking Diagram

Indicative Requirements

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

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

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

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

#### Innovation

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

We would hope this would consider:

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

whilst complying with mandatory and compulsory requirements.

This should apply equally to the:

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

but again within the mandatory and compulsory design requirements.

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

Other Indicative elements are:

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

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

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

No Variant Bids

In accordance with the OJEU notice, Candidates should be aware that <u>no</u> variant bids will be permitted.

Slide 43 – Sustainability

Sustainability is a priority for the Board as it is for the NHS generally.

Bidders will be required to adhere to the extensive guidance outlined in the BCRs and to demonstrate that any proposals developed will be sustainable and in line with current policy and practice.

Bidders are required to adopt an integrated approach to the social, environmental and economic well-being of the area served, now and for future generations, as part of their approach to sustainability.

The requirements and policies of the City of Edinburgh Council will also need to be met and applied in the proposals that will be submitted for Planning Permission.

The key requirements to be met by Bidders in regard to sustainability include:

- Achieving a BREEAM 2011 rating of 'very good' as a minimum.
- Minimising waste during construction and operation and exploit all recycling opportunities.
- Using Greencode and implementing an Environmental Management System.
- Respect the local landscape and protect natural habitat and species.
- Avoid any design features associated with sick building syndrome.
- Achieve an energy usage rating for the facility within the stated target.

# Slide 44 – Community benefits

The Board recognises the very significant training and employment opportunities delivery of this Project can create for the wider community and beyond.

The Board also recognises that the Project has the potential to drive significant initiatives relating to regeneration, sustainability and social benefits.

The Board is therefore incorporating a range of social considerations or Community Benefits Requirements into its procurement which will ultimately form contractual requirements.

The requirements consist generally of the following -:

- Targeted Recruitment and Training /Employment and Skills Plan
- Supply Chain Development in relation to SME's and Social Enterprises.

# Supply Chain Development: SMEs

- The long term sustainable development of the SME base is vital to driving sustainable economic growth within Lothian, Scotland and beyond.
- The Board recognises the need to support the development of the SME sector by developing a procurement approach which ensures their exposure to procurement opportunities related to the Project.

# Supply Chain Development: Social Enterprises

- The Board supports the Scottish Government's policy on Social Enterprise and believes that Social Enterprises have a distinct and valuable role to play in helping to create a strong, sustainable and socially inclusive economy.
- As such, the procurement process must ensure that Social Enterprises are made aware of supply chain opportunities offered by the Project.
- Social Enterprises are involved in a wide range of industries, from recycling, community transport, landscaping, catering, employment and training to event management.

# Other Community Benefits

Bidders will also be required to set out any additional Community Benefits that they would be willing to provide over the period of the contract, for example:

- undertake educational initiatives with community, voluntary and charitable organisations relevant to the Project
- support or contribute in some other way to the work of community,
   voluntary and charitable organisations associated with the Project.

#### Slide 45 – Traffic Management

During construction activities for the Project, the RIE shall continue to operate and function as a 24 hour working hospital facility.

Accordingly, it is of paramount importance to the Board that construction activities by Project Co at the RIE site are respectful of the existing operational needs of the RIE for safe traffic management.

The Board wishes to minimise construction traffic using Little France Crescent and intends that the primary construction access to the site will be via a dedicated construction access from Old Dalkeith Road or Little France Drive (i.e. rather than over Little France Crescent).

If such a dedicated access is not technically feasible, would not represent value for money or if construction access is otherwise required over Little France Crescent then access over Little France Crescent will be available.

However, it should be noted that where construction access is required over Little France Crescent, Bidders shall be required as part of Competitive Dialogue to prepare and submit to the Board a Traffic Management Strategy for approval.

#### Slide 46 - Access

Likewise, it is of paramount importance to the Board that safe vehicular and pedestrian access to the RIE is maintained at all times.

Accordingly, in addition to a traffic management strategy, where permitted works (eg, to install services) are to be undertaken out with the site and may impact upon access to RIE, Bidders shall be required, as part of the competitive dialogue, to again prepare and submit to the Board for approval an access strategy to allow for the continued access and egress of pedestrians and vehicles to and from the RIE during the relevant construction period.

#### Slide 47 - H&S

Project Co. will be a member of the Little France Campus Working Group and actively participate in the planning and management of Health + Safety issues

within the RIE Campus. They will be joined by NHSL, Consort Healthcare and the University of Edinburgh.

This Group will allow all partners to come together to cooperate, share information and work together to provide a safe working environment ensuring that works concerned with the Facility do not impact adversely on the day to day operation of the RIE campus.

# The Group will:

- oversee the Day to Day management of Health and Safety within the RIE campus.
- monitor and review the program of works ensuring that correct procedures are adhered to, including but not limited to:
  - Local policies and procedures.
  - Method statements
  - Safe systems of work, permits etc
  - Health & Safety inductions
- liaise with clinical departments and communicate mitigation measures in the interests of maintaining operations and a safe site.

The Group will report up to the RIE Health and Safety Group who in turn report to the Acute Hospitals Health and Safety Committee.

#### Slide 48 – Facilities Management

Project Co will be required to provide a lifecycle replacement, hard FM service with associated helpdesk facilities including grounds maintenance, utilities procurement and management, pest control and external fabric cleaning.

It is planned that soft FM services will be provided by a combination of the Board and third party providers. There will be a number of operational interfaces not only with the Board's team but also the FM staff working within the RIE.

Slide 49 - Equipment

Project Co will be responsible for the procurement, installation, maintenance and lifecycle replacement of all Group 1 equipment and, the installation of certain Group 2 equipment.

Slides 50 – 63 - Programme, Process and Project Management
SFT has provided a suite of contractual documents, comprising a NPD Project
Agreement and articles that will be adopted for use in this Project, appropriately
amended for project and NHSL specific issues.

The DBFM contact between the Board and the NPD partner will reflect the SFT Standard NPD Project Agreement.

In particular, the NPD payment mechanism will be revised to reflect the fact that the facilities will be required on 24/7 basis.

Risks will be allocated as per SFT Standard NPD Project Agreement.

Slide 51 – Programme Dates

Slide 52 – Pre-qualification process

The PQQ and IM have been prepared by the Board for the purpose of providing an application procedure for Candidates interested in tendering and to assist Candidates in making their own evaluation of the potential opportunity.

The PQQ document sets out the completion and submission requirements of PQQ responses, the conditions for participation and the methodology to be used by the Board relative to the pre-qualification and selection process.

Note: Companies interested in bidding for the NPD contract have noted their interest through the Public Contracts Scotland website. The presentation and

information from this event will be uploaded there for parties unable to attend today. All queries and contact with NHS Lothian about the contract should be directed through the PCS portal, and all responses will be received through that route.

# **PQQ Process:**

- Compliance and completeness check.
- Preliminary assessment to evaluate the "Pass/Fail" questions.
   (Candidates should note that the preliminary assessment will include an assessment of each remaining Candidate's financial standing submission(s) and any Candidate's PQQ submission assessed as failing the financial standing evaluation will be rejected by the Board).
- Detailed assessment to evaluate the scored questions.

Evaluation guidance is provided in the PQQ for each question that will be scored.

Unless otherwise indicated, responses to each question will be scored out of 10 and based on the degree to which the response covers the range of factors specified in the relevant evaluation guidance and as appropriate to the question, depth of understanding of the issues and/or quality of examples and experience provided.

Board intends to shortlist three Candidates who will be taken through to the competitive dialogue stage as Bidders.

Slides 53 – 57 – Competitive Dialogue

It is proposed that the competitive dialogue process will comprise of a series of five dialogue meetings prior to submission of the draft final tender.

Initially the dialogue meetings will focus on the strategic direction of the Project and development of the Candidate's proposals, including technical, financial and legal proposals.

Informal and non-evaluated submissions will be required in advance of the dialogue meetings to support the Candidate's proposals.

As the dialogue process proceeds the technical, financial and legal proposals will be looked at in more detail. This will require a more formal submission, focusing on key issues including affordability.

Feedback will be given to each shortlisted Candidate at every stage of dialogue and will inform the basis for the remaining dialogue prior to submission of the draft final tender.

# Slide 58 – Programme

- 7 months to close dialogue
- Further 3 months to appoint Preferred Bidder
- Final 7 months to achieve Financial Close

Following the fifth dialogue meeting Bidders will be asked to submit their final proposals in draft form based on an agreed contractual position. Draft proposals will be reviewed for compliance and to ensure they are presented correctly to allow full evaluation to take place at the final tender stage.

Only limited dialogue is anticipated after submission of draft final tenders. This will allow the Board to engage with each Bidder to clarify, specify or fine tune their tender.

Dialogue will formally close when the Board is comfortable that one or more solutions are capable of meeting its needs. An Invitation To Submit Final Tender (ISFT) will then be issued.

Following the detailed evaluation of the final bids, a final evaluation report will be prepared to recommend the Preferred Bidder. This recommendation will be

based on the bid that represents the most economically advantageous tender\* (MEAT).

It is envisaged that the Board and the Preferred Bidder shall then proceed towards a position where the DBFM contract can be entered into and signed.

At this time the Preferred Bidder shall not be entitled to make material changes to any aspect of its final bid. During this period the Preferred Bidder will apply for and obtain detailed planning approval of the detailed components of the Project, through applications for approval of matters specified in the conditions attached to the planning permission in principle.

In parallel, activity will take place to complete the full business case for the Project and gain all necessary approvals to allow financial close to take place.

\* not purely one of price, it must be one of price and quality in combination.

A bid with a higher price can be selected if it buys additional 'economic advantage' - in the Boards approach, this means buying additional quality as we can attach a value to that.

Slide 59 - 62 - Team Structure

The Board has a fully resourced in-house team dedicated to the delivery of the Project, supported by a team of specialist, technical, legal and financial advisers.

NHSL members of the Core Evaluation Team – the main interface with Bidders.

Our advisers - all of these people are ably assisted by an extensive NHSL and Advisory Support Team.

A project office at 56 Canaan Lane has been up and running since April and has all necessary facilities to host the forthcoming procurement process

#### Slide 63 - Conclusion

Four key outcomes for the project:

# We hope for good design

- Fit for purpose
- Sustainable
- Efficient
- Coherent
- Flexible
- · Responsive to context
- Good looking and a clear expression of the brief

#### We must be able to afford it

- In these very tight economic times it is hardly surprising that more than ever the Board must work within an expenditure cap.
- This drives us strictly along a path of realising our "needs" not our "wants"
- Value for Money is everything

# We expect deliverability

- We consider we have created a strong platform to spring from through the work already done on the Enabling Works + Reference Design.
- All participants should be forward looking and seek to maintain momentum at all times.
- Let's get in built

#### We wish to foster and maintain a long lasting partnership with ProjectCo

We look forward to evaluating your submitted PQQ



# Re-provision of RHSC and DCN at Little France

**ITPD: Volume 3** 

(Part 6 Section 3 Sub-Sections A to E of the Schedule to the Project Agreement)

**The Board's Construction Requirements** 

**Author: NHS Lothian (The Board).** 

Doc No: Volume 3
Title Board's C

**Board's Construction** 

Requirements

Revision: Rev C

Date: August 2013

# SCHEDULE TO THE PROJECT AGREEMENT

#### PART 6

# **Section 3: The Board's Construction Requirements**

**Sub-Section A: Introduction** 

Part 6 Section 3 of the Project Agreement encompasses the construction requirements of the Board and is divided into the following Sub-Sections and Appendices:

Sub-Section A Introduction

**Sub-Section B** Definitions and Abbreviations

Sub-Section C General Requirements

This Sub-Section contains overall philosophy and standards for the design, construction and finish and associated infrastructure, both internal and external for the Works and/or the Facilities.

**Sub-Section D** Specific Clinical Requirements

This Sub-Section contains design philosophy and specific requirements for each of the Clinical Services to be provided from the Facilities.

**Sub-Section E** Specific Non-Clinical Requirements

This Sub-Section contains Soft FM summary interface specifications and other Non-Clinical specifications related to the Works and/or the Facilities.

**Appendix A** Interface with Campus Site and/or Campus Facilities

Part 1 – Interface Construction Matters and Interface Proposals

Part 2 – Interface Proposals Procedure

Part 3 - General Matters

Annex 1 - Form of Notice

**Appendix B** Interface Output Specification

**Appendix C** Environmental Matrix

Appendix D Not Used

Appendix E Initial Drainage Proposal

**Appendix F** Access Strategy

**Appendix G** Connection Proposal

**Appendix H** Construction Access Proposal

Appendix I Oversail Strategy

**Appendix J** Service Proposal

**Appendix K** Substation Proposal

**Appendix L** Supplemental Drainage Proposal

Appendix M TMS

# SCHEDULE TO THE PROJECT AGREEMENT

#### PART 6

# **Section 3: The Board's Construction Requirements**

#### Sub-Section B: Definitions & Abbreviations

A. Terms used in this Schedule Part 6 Section 3 where defined in the Project Agreement shall have the meanings ascribed to them in the Project Agreement or otherwise shall have the meanings given to them as follows:-.The following abbreviations have been used in this Schedule Part 6 Section 3:

24/7 Twenty four hours a day seven days a week

ACS Accreditation (formerly CORGI Regulations)

AEDET Achieving Excellence – Design Evaluation Toolkit

AFD Action for Disability

AHU Air Handling Unit

AGSS Anaesthetic Gas Scavenging System

BCR Board's Construction Requirements

BEAM Building Environment Assessment Methodology

BMS Building Management System

BREEAM BRE Environmental Assessment Method

BS British Standard

BSRIA Building Services Research & Information Association

CAA Civil Aviation Authority

CAMHS Child and Adolescent Mental Health Service

CCTV Closed-circuit television

CDM CDM Regulations

CEL Scottish Government Health Directorates Circulars

CEN European Committee for Standardisation

CHP Combined Heat & Power

CIBSE Chartered Institution of Building Services Engineers

COSHH Control of Substances Hazardous to Health

CP Code of Practice

CYPH Children and young peoples hospital which may

otherwise be known as RHSC (Royal Hospital for Sick

Children)

DCN Department of Clinical Neurosciences which forms part of

the Facilities

DDI Direct Dial In

DGH District General Hospital

DHW Domestic Hot Water

DoE Department of the Environment

ED Emergency Department

EMS Environmental Management System

EN Euronorm Standards

EPC Energy Performance Certificate

EU ETS European Union Emission Trading System

HBN Health Building Notes

HDL Health Department Letters

HDU High Dependency Unit

HFN Health Facilities Notes

HFS Health Facilities Scotland

HGN Health Guidance Notes

HIS Healthcare Improvement Scotland

HSE Health & Safety Executive

HSDU Hospital Sterilisation and Disinfection Unit

HTM Health Technical Memoranda

HVAC Heating Ventilation & Air Conditioning

HWS Hot Water Supply

ICAO International Civil Aviation Organisation

ICT Information & Communication Technology

IDS Intruder Detection System

IES Illuminating Engineering Society

IEE Institution of Electrical Engineers

IHT Institute of Highways & Transportation

IP Interpenetration Protection rating

IPS Isolated Power Supply

IT Information Technology

ITPD Invitation to Participate in Dialogue

JAA Joint Aviation Authority

LAN Local Area Network

LEV Local Exhaust Ventilation

LPS Loss Prevention Standard

MAOT Mobile Air Operations Team

MCA Maritime and Coastguard Agency

MEL Management Executive Letter (now known as Health

Department Letters – HDL)

MRI Magnetic Resonance Imaging

MTBF Mean Time Before Fail

MOD Ministry of Defence

NBS National Building Specifications

NEAT NHS Environmental Assessment Tool

NHBC National House Building Council

NHS National Health Service

NHSIA National Health Service Information Authority

NHSL NHS Lothian

PA Public Address system

PBX Private Branch Exchange

PCIU Percutaneous Cardiac Investigation Unit

PCP Project Co's Proposals

PICU Paediatric Intensive Care Unit

PIR Passive Infra-red

PoE Power-over-Ethernet

PPE Personal Protective Equipment

PPG Planning Policy Guidance

RBD Reliability Block Diagram

RDD Reviewable Design Data

RFFS Rescue and Fire Fighting Services

RHSC Children and young peoples' hospital (which may be

known as CYPH and/or Royal Hospital for Sick Children)

which forms part of the Facilities

SAR Search and Rescue

SCIEH Scottish Centre for Infection and Environmental Health

SCIM Scottish Government Capital Investment Manual

SEHD Scottish Executive Health Department

SEPA Scottish Environment Protection Agency

SFPN Scottish Fire Practice Notes

SFT Scottish Futures Trust

SGHSCD Scottish Government Health and Social Care

**Directorates** 

SHFN Scottish Health Facilities Notes

SHGN Scottish Health Guidance Notes

SHPN Scottish Health Planning Notes and Scottish Hospital

**Planning Notes** 

SHS Scottish Healthcare Supplies

SHTM Scottish Health Technical Memoranda

SHTN Scottish Hospital Technical Notes

SI International System of Units

SUDS Sustainable Urban Drainage System

TPO Tree Preservation Order

UPS **Un-interruptible Power Supplies** 

VIE Vacuum Insulated Evaporator

VDU Visual Display Unit

VoIP Voice over Internet Protocol (or Voice Over IP)

WC Water Closet

**WRAP** Waste & Resources Action Programme

B. The following additional definitions have been used in this Schedule Part 6 Section 3:

Adaptability Strategy

Appendix A

Means the Adaptability Strategy, provided by Project Co to define their strategy for ensuring appropriate provision for adaptability and flexibility of the Facilities

Means Appendix A (Interface with Campus Site and/or Campus Facilities) annexed to this Sub-Section C of Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters) as varied, amended or supplemented from time to time in

accordance with the Project Agreement;

Benefit Realisation Plan A benefits realisation plan acts as an overview of the main milestones detailed in each benefit profile. It serves as a management tool to monitor, track and manage the collective set of benefits associated with a project. The key activities (e.g. measurements, evaluations etc), from each benefit should be drawn together to form the consolidated plan. This will provide a centralised resource to help keep track of what needs to be done, when and by whom, to manage the successful realisation of benefits.

Blue Light Ambulance, police and fire services

Car Park B The car park which ceases to be used as a car park and

is the Site

Certified Wood Timber certified by Forest Stewardship Council

Corporate Greencode Corporate GREENCODE® is a suite of software, templates and support materials developed by the NHS for the NHS. It is maintained by Health Facilities Scotland

(HFS) to:

guide you through the development and implementation of a corporate Environmental Management System (EMS) and

provide tools to help you run and maintain your corporate EMS.

Council

The City of Edinburgh Council

Design Champion Person in the Board who promotes the importance of achieving quality in capital developments and in ongoing initiatives to improve both the patient environment and the working lives of staff

Encode

HTM 07-02: EnCO2de – Making energy work in healthcare

Environmental Matrix Means the Environmental Matrix, which details the room environmental condition requirements of the Board required within each department / unit / space / area. The title is Reference Design Envisaged Solution — RHSC / DCN Environmental Matrix version third issue as set out in Appendix C of this Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters) (as varied, amended or supplemented from time to time in accordance with the Project Agreement);

**Existing CAMHS** 

Child and Adolescent Mental Health Services currently at the Royal Edinburgh Hospital and Forteviot at the Existing RHSC

**Existing DCN** 

Department of Clinical Neurosciences, Western General Hospital, Edinburgh

**Existing RHSC** 

Royal Hospital for Sick Children, 9 Sciennes Road, Edinburgh

Family Council

Works collaboratively with partners, such as the Board, RHSC reprovision team and other forums, to ensure that the family perspective is integrated into current service provision, including redesign, for Children & Young People (C&YP) services

Firecode

Firecode consists of a number of Health Technical Memoranda (HTM) which consider policy, technical guidance and specialist aspects of fire precautions. Full list of HTM obtained from http://www.dh.gov.uk/en/Publicationsandstatistics/Letter sandcirculars/Firecode/DH 609

Good Practice Guidance for selecting materials The edition of the publication entitled "Good practice in the selection of construction materials" (British Council for Offices (BCO): 2011) or any amended or updated version as at Financial Close.

Green Travel Plan Means the NHS Lothian Sustainable Development Strategy Green Travel Plan.

HAI SCRIBE Healthcare Associated Infection System for Controlling

Risk In the Built Environment

**HEAT** Means Health Improvement Efficiency and Governance,

Access to Service, and Treatment Appropriate to

Individuals

Hot Core Direct vertical patient circulations route from Helipad to

> Emergency Department and from Emergency

Department to Operating Theatres.

Identikit Means NHS Scotland Identity Guidelines

Major Incident As defined by the Board's Major Incident Strategy

Response Plan Strategic Plan Number reference HPT

E023 03

NHS

Means the requirements defined in paragraph 2.3 of this Requirements

Sub-Section C as the same may be amended from time

to time

Nursery Means former Acorns nursery 51 Little France Crescent

Edinburgh EH16 4SA

**Project Sponsor** Person who is responsible within the Board for the

success of the project

Safety Action

Notices

Safety Action Notices were standard priority safety warnings issued in Scotland from 1995 to 2009 when they were superseded by Medical Device Alerts (from the MHRA – Medicine and Healthcare Products Regulatory

Agency) and Estates & Facilities Alerts.

Secured by Design

Is the official UK Police flagship initiative supporting the

principles of 'designing out crime'

Touch Down

Base

A workstation space where staff can access a PC, Telephone, Printer, radiological examinations, patient

monitoring systems, emergency nurse/patient call system and other administrative tools to assist the

clinical practitioner in executing their job.

Vistamatic Glazed secure vision panel

# SCHEDULE TO THE PROJECT AGREEMENT PART 6

**Section 3: The Board's Construction Requirements** 

**Sub-Section C: General Requirements** 

#### 1 Introduction

This document sets out the key design criteria and the core requirement to create a modern facility to re-provide services from the Existing RHSC, Existing CAMHS and the Existing DCN in a single building adjoining the RIE Facilities at the Campus Site. The design shall be enduring and take account of the history, culture and physical requirements of these internationally renowned centres of excellence.

Part 6 Schedule 3 Sub-Section C forms the general construction requirements included in the Board's Construction Requirements. Project Co shall satisfy all the requirements under this Sub-Section C.

This (and subsequent) sections of Sub-Section C of the Board's Construction Requirements outlines the overall aims of the Board with regard to the design quality of the Facilities. This Sub-Section C shall be read in conjunction with, but not limited to the following documents:

The Board's Policies; and

Project Specific Requirements defined in Sub-Sections D and E, and Appendices to this Schedule Part 6 Section 3.

Sub-Section C is divided into the following paragraphs.

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# 2 Project Wide Requirements

The Board's vision is to provide high-quality, patient-centred services from modern Facilities. The new hospital is a single building supported by the separate energy centre but Project Co may provide other buildings on the Site to house plant and services. Where the term "building" is used, this refers to the RHSC and DCN hospital building. The energy centre and Project Co's other buildings shall meet the relevant requirements of Part 6 Schedule 3 Sub-Section C of the Board's Construction Requirements. The physical design and access to the Facilities shall promote and enhance the delivery of that full range of services, all to the benefit of patients, visitors, public and staff alike. Additionally the design strategy shall respond to the needs and aspirations of a variety of service providers including the NHS, local authorities and other community based services. The wish of the Board is to create a centre of excellence that may be an inspiration to others and set a benchmark of quality of sustainable design.

Project Co shall ensure the design complies with the general ethos detailed here, whilst also addressing the detailed requirements listed in the following clauses. It shall be noted that the requirements detailed are not exhaustive, and it is recognised that specific clinical needs will determine the nature and design of Facilities in some areas.

The Board requires the following matters to be addressed as part of its requirements:

- a) The need for Project Co to maintain leadership throughout to the agreed final design stage and;
- b) The Board's management team will be actively involved and will support both the project team and the clinicians.

Project Co shall support the Board's vision as stated above and develop a partnership with the Board to ensure that these aspirations are met and that Project Co co-operate fully in the evaluation of these criteria with the Board at key stages of the process.

Project Co shall ensure that the design of the Facilities draws upon and endeavours to further develop, improve and exceed current best practice (and Good Industry Practice) standards achieved in other similar schemes, and meets the requirements of the prospective patient groups, staff and the public. This philosophy of design and sustainability shall be extended across all parts of the Facilities including landscaped and external areas as well as the essential patient areas and these endeavours should extend to benefit the wider population of the community.

The Board is keen to actively participate in the design process. To facilitate this, Project Co shall engage the Board in the design and in particular the Reviewable Design Data.

# 2.1 Approach to Design

The Scottish Parliament has articulated the desire that Scotland becomes "the best small country in the world" and has further asserted that the quality of our built environment is a key factor in achieving this. The Scottish Government Health and Social Care Directorates (SGHSCD) believe that improving the quality of our caring environments is crucial to delivering the confident, compassionate Scotland that is aspired to.

The new building will follow the design aspirations and guidance laid out in the Policy on Design Quality for NHS Scotland (2010) to which the Board subscribes and implements through its Design Champion. The DCN will meet the objectives of the DCN stakeholders. Specifically for children and young people it will deliver the quality objectives laid down by the Family Council

and other stakeholders in the project. The quality objectives of the children and young people's Family Council are:

- a) The new hospital will be a beautiful place with Children and Young People at the centre of a nurturing, engaged and safe community.
- b) The new hospital will provide systems and spaces that recognise the healing capacity of sustaining everyday lives and provide parallel pathways of care for patients, carers and families.

The DCN part of the Facilities will have a physical link with the existing RIE Facilities specifically with the critical care unit. Project Co should generally design and also satisfy themselves that the Facilities are capable of being so designed so that the construction and operation of the Facilities will all be within the Site subject to the rights granted to Project Co on the RIE Site and/or Bioquarter Site, as applicable, as detailed in Clause 9 (Nature of Land Interests) of the Project Agreement and subject to Appendix A. If any access or other rights are required for the construction and operation of Facilities outwith the Site and on any part of the Retained Site and/or Retained Estate and/or Bioquarter Site then Project Co will be required to notify the Board and seek agreement of the Board for the exercise of any such rights. If Project Co requires any access or other rights outwith the Campus Site and/or Bioquarter Site then Project Co recognises that consent to such rights will be required from the owner and/or operator and/or occupier of the affected property and Project Co will be responsible for obtaining any such consents.

The design will be evaluated against BREEAM 2011 New Construction (SD5073) (with BREEAM ENE1 target of 6 credits (excellent) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.ENE1).

The design needs to realise the aspirations of the Benefit Realisation Plan.

The Design Champion for the project is the NHS Lothian's Project Sponsor, supported by the Director of Capital Planning and Projects, and the design process is managed by the reprovision project team.

Project Co shall take cognisance of all the architectural and building services implications of the requirements described in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

#### 2.2 General Requirements of the Board

Architectural and General Design

Project Co shall ensure the Facilities comply with the following general requirements of the Board:

- a) Application of the principles contained within "A Policy on Architecture for Scotland, 2001" and "A Policy on Architecture for Scotland, Public Consultation, Review of Policy" 2006 both published by the Scottish Government;
- b) Adherence to the requirements set out in CEL 19 (2010) "A Policy for Design Quality for NHSScotland, 2010 Revision published by the Scottish Government;

- c) Application of the principles contained in "Improving Standards of Design in the Procurement of Public Buildings", 2002 published by the Office of Government Commerce:
- d) Application of the principles within the Scottish Government Health and Social Care Directorate's "A Policy on Sustainable Development for NHSScotland 2012". All NHS Scotland bodies engaged in the procurement of new healthcare buildings must carry out independent sustainability accreditation for projects;
- e) Application of the principles contained in "Healthier Places" Architecture & Design Scotland; and
- f) Application of the principles contained in "A Vision of Health NHSScotland's agenda for realising value in the developing healthcare estate" Architecture & Design Scotland

## Clinical Design Issues

- a) In-patients and out-patients shall have an appropriate level of privacy and allow an adequate level of observation by staff;
- b) The Facilities shall be designed to handle the projected workload;
- c) The design shall provide and promote a calm, safe working environment and shall contribute to the development of this requirement through the choice of colours, soft furnishings and the visual integration of all safety and security systems;
- d) Entrances and waiting areas shall have a light, spacious and welcoming atmosphere and the main entrances shall be immediately apparent;

## General Design Issues

- a) Whilst maintaining an integrated approach to the design of the Facilities, Project Co shall ensure that individual departmental design is age-appropriate and that patient orientation and recognition of location is achieved. Project Co shall consult the Board with respect to the interior design proposals and the Board's preferences and opinions shall be taken into account in the final choices;
- b) The Facilities shall incorporate the recommendations of "Effective Wayfinding and Signing Systems Guidance for Healthcare Facilities" 2<sup>nd</sup> Edition 2005, NHSScotland Signage Guidelines, NHSScotland Identity Guidelines and BS8501:2002. "Graphic symbols and signs Public information symbols" and have a co-ordinated décor and sign-posting scheme to create a safe and readily-understood patient environment;
- c) The Facilities shall incorporate appropriate standards of security, and minimise the potential for exposure to crime and vandalism. Recognising that particularly vulnerable groups will use the Facilities, security will be designed to meet the needs of all patients, visitors and staff. Vulnerable individuals include, but are not exclusive to, young children, mental health patients, and the frail and elderly. The Facilities shall meet the requirements of Secured by Design. In this respect, as part of the planning process, discussions with the Lothian and Borders Police Architectural Liaison team and Special Branch shall take place, and any comments made reflected in the Facilities as appropriate (see paragraph 3.7 of this Sub-Section C for further guidance);and
- d) The Facilities shall be designed such that all maintenance and life cycle component replacement procedures can be carried out practically, efficiently and effectively and with minimal disruption to Clinical Services.

All standards, guidance, codes of practice and all other titled requirements that Project Co shall comply with are to be the current version of the requirement or its replacement requirement without the need for a Change. Refer also to paragraph 2.5 below.

#### 2.3 NHS Requirements

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

- a) The themes, issues and recommendations in "Better by Design: Pursuit of Excellence in Healthcare Buildings" by the Department of Health;
- b) New Policy on Design Quality for NHS Scotland published by SGHSCD;
- c) Firecode;
- d) HAI SCRIBE;
- e) HBN;
- f) HFN and SHFN;
- g) HGN and SHGN;
- h) HTM and SHTM;
- i) SHTN;
- i) SFPN:
- k) HDL;
- I) SHPN;
- m) NHS publication 'Performance requirements for building elements used in healthcare facilities';
- n) NHS Scotland & NHS Policies;
- o) Board Policies as scheduled and available in the Disclosed Data as such schedule and Board Policies may be amended from time to time;
- p) Health Department Letters (or Management Executive Letters) as appropriate published by SEHD and SGHSCD;
- q) Safety Action Notices published by NHS Scotland;
- r) Healthcare Improvement Scotland (HIS);
- s) NHS Model Engineering Specifications;
- t) Department of Health publication "Better by Design";
- u) Corporate Greencode;
- v) NHS Scotland Fire Safety Management, incorporating NHS Scotland Firecode;
- w) Hazard Notices issued by NHS Scotland; and
- x) HSC 1999/123;

#### i. Firecode

Project Co shall ensure the Facilities comply with the NHS Scotland Fire Safety Management - a suite of documents which explains the policy and technical guidance in fire precautions in hospitals and other healthcare premises, comprising the Health Facilities Scotland Fire Safety Policy, the Scotlish Health Technical Memoranda (SHTM) and Scotlish Fire Practice Notes (SFPN) which all comprise NHS Scotland Firecode, the Fire Safety Documentation Reference Guide and A Model Management Structure for Fire Safety.

Project Co shall prepare proposals in accordance with NHS Scotland Firecode to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement prior to the submission of the proposals for approval by the Relevant Authority including without limitation building control department.

In the event of a conflict between the requirements of the local building control officers and NHS Scotland Firecode the more onerous requirements shall take precedence. Project Co shall notify the Board as soon as such conflict is known or suspected and shall further advise the Board of Project Co's proposed relevant design solution as early as possible before formal submission for review by the Board. When the more onerous requirement is to be used the Board will have the right to decide what constitutes the more onerous requirement.

Any fire strategy which affects the Site will also have to have regard to, be compatible with and operate in conjunction with the fire strategy and procedures for the RIE Facilities and/or Retained Estate, as applicable.

## ii. Health Building Notes (HBN)

Project Co shall take fully into account the guidance and advice included within HBN. Project Co shall ensure the Facilities comply with the requirements of HBN and shall adopt as mandatory any recommendations.

# iii. Health Facilities Notes & Scottish Health Facilities Notes (HFN & SHFN)

Project Co shall, in relation to all SHFN and all HFN (except HFN where an SHFN exists with the same number and covering the same subject matter): take fully into account the guidance and advice included within such SHFN and HFN; ensure that the Facilities comply with the requirements of such SHFN and HFN; and adopt as mandatory all recommendations and preferred solutions contained in such SHFN and HFN.

#### iv. Health Guidance Notes & Scottish Health Guidance Notes (HGN & SHGN)

Project Co shall, in relation to all SHGN and all HGN (except HGN where an SHGN exists with the same number and covering the same subject matter): take fully into account the guidance and advice included within SHGN and HGN. Project Co shall ensure the Facilities comply with the requirements of SHGN and HGN and shall adopt as mandatory any recommendations.

# v. Health Technical Memoranda & Scottish Health Technical Memoranda (HTM & SHTM)

Project Co shall, in relation to all SHTM and all HTM (except HTM where an SHTM exists with the same number and covering the same subject matter): take fully into account the guidance and advice included within such SHTM and HTM; ensure that the Facilities comply with the requirements of such SHTM and HTM; and adopt as mandatory all recommendations and preferred solutions contained in such SHTM and HTM.

## vi. Scottish Hospital Technical Notes (SHTN)

Project Co shall, in relation to all SHTN take fully into account the guidance and advice included within such SHTN; ensure that the Facilities comply with the requirements of such SHTN; and adopt as mandatory all recommendations and preferred solutions contained in such SHTN.

# vii. Scottish Fire Practice Notes (SFPN)

Project Co shall, in relation to all SFPN take fully into account the guidance and advice included within SFPN. Project Co shall ensure the Facilities comply with the requirements of SFPN and shall adopt as mandatory any recommendations.

## viii. Scottish Government Health Directorates Circulars (CEL and HDL)

Project Co shall, in relation to all CEL and HDL take fully into account the guidance and advice included within CEL and HDL. Project Co shall ensure the Facilities comply with the requirements of CEL and HDL and shall adopt as mandatory any recommendations.

# ix. Scottish Health Planning Notes and Scottish Hospital Planning Notes (SHPN)

Project Co shall take fully into account the guidance and advice included within SHPN. Project Co shall ensure the Facilities comply with the requirements of SHPN and shall adopt as mandatory any recommendations.

# x. Sustainability

Project Co shall comply with the requirements set out in "A Policy on Sustainable Development for NHSScotland 2012". This policy supersedes and incorporates NHS HDL (2006)21 "An Environmental Management Policy for NHSScotland".

Project Co shall comply with the requirements set out in HTM 07-02 EnCO2de – making energy work in healthcare.

Project Co's proposals shall facilitate the achievement of an effective Environment Management System; the exemplar tool is Corporate Greencode's objectives.

Project Co's proposals shall allow the Facilities to achieve as a minimum "very good" rating when subjected to a BREEAM 2011 New Construction (SD5073) and BREEAM ENE1 target of 6 credits (excellent) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.ENE1

#### assessment.

Council requirements and NHS Policies including CEL 2 (2012), A Policy on Sustainable Development for NHSScotland 2012 to be read in conjunction with "A Sustainable Development Strategy for NHSScotland 2012", "Sustainable Development in the NHS", 2001 and, "NHS Estates, Sustainable Development: Environmental Strategy for the National Health Service," 2005.

#### xi. General

Project Co shall take fully into account all health building briefings and planning guidance relevant to the briefing, design and construction of an acute general hospital, particularly but not limited to the material published by SEHD and NHS Estates guidance formally promulgated for use in Scotland.

Project Co shall also take fully into account the guidance and advice included within the following publications as the same are amended from time to time:

- a) Enhancing privacy and dignity-achieving single sex accommodation;
- b) National standards of cleanliness for the NHS Scotland;
- c) Quality Guidelines: Access for People with Disabilities (April 2000);
- d) Infection Control in the Built Environment (SHFN 30 & HAI-SCRIBE);
- e) National Standards of cleanliness for the NHS Implementation Guidance Toolkit;
- f) Standards for Environmental Cleanliness in Hospitals; and
- g) Scottish Infection Manual "Managing the Risk of HAI in NHS Scotland".

Project Co shall ensure the design of the Facilities incorporates the following requirements;

- a) Minimisation of the need for staff to be with patients in secluded or isolated parts of the building;
- b) The layout of the inpatient units shall discourage patients from leaving the units except when authorised to do so. Project Co shall give due consideration to channelled exit routes that require the negotiation of staffed areas; and
- c) Ease of patient observation by staff.

# 2.4 Minimum Design & Construction Standards

Project Co shall also ensure that the Facilities comply with Good Industry Practice, NHS Scotland requirements, relevant statutory requirements (including highways) and required consents including, but not limited to, the following as the same may be amended from time to time:

- a) Construction (Design and Management) Regulations 2007;
- b) Management and Safety at Work Regulations 1999;
- c) Health & Safety legislation, including all UK and Scottish Statutory Instruments;
- d) Recommendations of the Health and Safety Executive;
- e) Control of Substances Hazardous to Health (COSHH) Regulations 2002 and amendments;
- f) Manual Handling Operations Regulations 1992;
- g) Health and Safety (Display Screen Equipment) Regulations 1992;
- h) Workplace (Health, Safety and Welfare) Regulations 1992;

- i) BS OHSAS 18000:2007;
- j) Quality Assurance System to BS EN ISO 9000 and 9001;
- k) The Equality Act 2010;
- I) The Climate Change (Scotland) Act 2009;
- m) "Better Public Building" by Department of Trade & Industry;
- n) The Building (Scotland) Act 2003 and its most recent amendments;
- o) The Fire (Scotland) Act 2005 and its most recent amendments;
- p) The Fire Safety (Scotland) Regulations 2006;
- q) The Building (Scotland) Regulations 2004 and its amendments;
- r) The Non-Domestic Technical Handbook 2011 to The Building (Scotland) Regulations 2004 and its amendments
- s) Scottish Fire and Rescue Service and NHS Lothian Fire Officer's requirements and fire safety requirements, including, but not limited to the Board's Fire Strategy, Fire Safety for NHS Scotland 2011, CEL 11(2011), Practical Fire Safety Guide for Healthcare Premises by Scottish Government and NHS Scotland Firecode series;
- t) Minimum requirements of the relevant utilities companies, and the Board;
- u) Requirements of The City of Edinburgh Council's Building Control Officer, Fire Officer and Environmental Health Officer;
- v) Relevant British Standards, Codes of Practice, or equivalent European industry recognised standards;
- w) Eurocodes;
- x) Building Research Establishment Digest Recommendations;
- y) Local Bye-Law and Regulations;
- z) Scottish Centre for Infection and Environmental Health guidance / recommendations;
- aa) Treasury Taskforce Private Finance Technical Note No. 7: How to Achieve Design Quality in PFI Projects;
- bb) The requirements of the National Radiological Protection Board;
- cc) Radiological Protection Act 1970;
- dd) Radioactive Substances Act 1993;
- ee) The Ionising Radiation Regulations 1999;
- ff) The Ionising Radiation (Medical Exposure) Regulations 2000;

gg) All other bodies and authorities having jurisdiction:

Project Co shall as a minimum achieve the standards detailed in the Patient Rights (Scotland) Act 2011; and

For the avoidance of doubt, Project Co shall provide all fixed fire fighting equipment to comply with statutory requirements and the requirements and recommendations of NHS Scotland Firecode.

## 2.5 Hierarchy of Standards

If there is any inconsistency within the terms of this Section 3 of Schedule Part 6 (Construction Matters) and the Appendices then the provisions of Appendix A, Appendix B (Interface Output Specification), Appendix E (Initial Drainage Proposal), Appendix F (Access Strategy), Appendix G (Connection Proposal), Appendix H (Construction Access Proposal), Appendix I (Oversail Strategy), Appendix J (Service Proposal), Appendix K (Substation Proposal), Appendix L (Supplemental Drainage Proposal) and Appendix M (TMS) shall prevail.

Where contradictory standards / advice are apparent within the terms of this Section 3 of Schedule Part 6 (Construction Matters) and the Appendices then subject to the foregoing paragraph then (1) the most onerous standard / advice shall take precedence and (2) the most recent standard / advice shall take precedence. When the more onerous requirement is to be used the Board will have the right to decide what constitutes the more onerous requirement.

Where there is a conflict of interest resulting from the use of the standards / advice Project Co shall involve the Board in the decision making process. The Board shall be entitled to make the final decision regarding the standards / advice to be used for the Facilities including any contradictions that may arise between items (1) and (2) above.

NHS Scotland standards shall take precedence over equivalent NHS England and Wales's standards.

In certain instances, NHS publications include a number of options or alternative solutions. Where the Board has defined their preference specifically, Project Co shall adopt these preferences as a mandatory requirement. Where no Board preference is stated, Project Co shall engage the Board in the design development process to seek and incorporate the Board's preference within the Facilities.

While the Board has placed a clear obligation on Project Co in relation to NHS publications, it also wishes to acknowledge that in certain cases the subject matter, guidance and advice included therein may have been further developed and improved since the date of publication. In this regard, the Board does not wish to limit the use of current best practice or innovation in relation to the adoption of design standards.

For the avoidance of doubt, the Board considers NHS publications reflect minimum standards and any alternatives proposed by Project Co shall provide a similar or enhanced level of service and quality.

#### 2.6 Information Technology & Record Information

Computer aided design shall be applied but not limited to the following:

a) Calculations and principal energy flow analysis for plant simulation;

- b) All drawn information layouts, schematics, etc.;
- c) "As fitted" and record documentation and drawings;
- d) Electrical, mechanical and communication services;
- e) Landscaping and site planning and;
- f) Traffic modelling and;
- g) All other design or design information which Project Co is obliged to provide the Board in accordance with paragraph 4.5.17 (Completion Requirements) and/or Clause 17.18 and/or 18 of the Project Agreement.

The systems used for computer aided design, including Building Information Modelling, shall be available for use by the Board and all of the information listed above shall be made available on such systems and maintained fully up to date throughout the Works and as applicable during the Operational Term and made available at all times to the Board. This is required in order to assist with the transfer and integration of new and existing information between the Board and Project Co.

# 3 General Design Requirements

Project Co shall design the Facilities to address the following issues:

#### 3.1 Character & Innovation

#### 3.1.1 Vision

Cognisance shall be taken of the long and illustrious histories of the Royal Hospital for Sick Children and Department of Clinical Neurosciences in Edinburgh. The new building will effortlessly and efficiently support service delivery, both now and in the future, and the human needs of the people within the building; those on whom the service depends - the staff – and all those it is intended to serve. The design should be valued by the patients, staff, visitors, other users and the local community. It shall have an enduring quality that will outlive transient trends or architectural fashion and will provide a memorable landmark building of which future generations will be proud.

The design shall reinforce a strong positive image of the NHS and be identifiable with its function of care. It shall therefore represent the standards of excellence that the teams of staff at all levels are working to achieve.

The building design shall avoid being a purely utilitarian environment, neither bland nor monotonous and certainly not an "off the shelf shoe box". Each part shall have a discrete visual identity. All vistas and focal points such as entrances should be instantly recognisable with distinctive visual interest.

It shall recognise the following human and healing aspects enshrined in NHSScotland's vision for the healthcare estate:

a) Uplifting – a building that people of the local area are proud of; that is a symbol of the NHS service ethos and the staff: that conveys respect to the patients and which encourages respectful behaviour in return; which offers an "architecture of hope".

- b) Local that one size does not fit all: that both the service configuration and the architectural expression should grow from, and support, the community needs and the unique characteristics of the place.
- c) Natural the importance of daylight and contact with the natural environment; of knowing the time of day and weather; of being able to escape into a garden; of being sustainable and using resources efficiently.

#### 3.1.2 Excellence for Patients

The design of buildings, external and internal appearance as well as the design of the external works, and landscape can have a positive or a negative effect upon patient care, staff experience at the work place and the way NHS healthcare buildings are perceived. Project Co shall develop design solutions which by the use of materials, lighting, shape, scale, mass and form of the building elements make a positive contribution to engendering the well-being of patients, staff and visitors.

#### 3.1.3 Healthcare Excellence

Project Co shall develop building design solutions that:

- Reinforces the dependability and reassurance that the NHS means to the local community;
- b) Respects their local environment and at the same time make a positive contribution to the urban context that they are in;
- c) Clearly expresses their function in external and internal appearance;
- d) Allow patient diagnostic and treatment areas to be differentiated in design concept and detail from inpatient areas; and
- e) Reflect that design considerations such as the distribution, size and proportion of windows and the use of materials can reflect the clinical function.

These elements shall be expressed in the scale and mass of the buildings, as well as the disposition of functions, whilst sustaining its effectiveness and efficiency of its use.

#### 3.1.4 Architectural Vision

Project Co shall develop building design solutions, which create an ordered composition of building elements in a stimulating form that successfully combines good standards of space, height, form, scale and use of materials and colours / images with associated functional requirements and the surroundings.

# 3.1.5 Stimulating Design

Project Co shall develop building design solutions which create a high quality, good working environment, both externally and internally, which shall provide a reassuring, enjoyable, convenient and safe hospital for all patients, their families, visitors and staff. This objective shall not be in conflict with the desire to produce a stimulating design. Project Co shall meet this objective and shall develop a design which will not date and which shall be adaptable in a way that does not destroy the original design vision / concept, whilst sustaining its effectiveness and efficiency of its use.

## 3.1.6 Design Innovation

The design shall reflect current and developing innovations in healthcare delivery and translate these into an innovative buildings solution including the incorporation of art integral to the architecture.

Innovation in design can range from whole concepts of hospital planning, distribution of functions etc to detail design of components, materials, spaces, use of technology etc.

# 3.1.7 Recognisable Quality

The Board expects high quality design to match the best national standards of healthcare provision it intends to implement.

Materials shall be substantive and of high quality. They shall be carefully detailed and constructed such that the quality is appreciated throughout the life of the Facilities. They shall retain their appearance within a compatible maintenance regime. For example, detailing of external materials shall be resistant to and shall not cause unsightly staining.

The life cycle plan and design detailing shall allow for replacement of elements of the buildings in a way that does not impair the design quality or adversely affect the service provision.

#### 3.2 Internal Environment

## 3.2.1 Quality Environment

"You can't just heal a person with medicine; the environment has to work too."

Young People's Advisory Group

The design of the Facilities shall create a sustainable, high quality, good working environment, both externally and internally which will provide a reassuring, relaxing, convenient and safe hospital for all patients, their families, visitors and staff.

The Board anticipate that an interior designer will be included in the Project Co's design team to secure a clear co-ordination of the interior materials and wayfinding within the Facilities, matching the furniture, furnishings and equipment being procured by the Board.

Communal patient areas, which include spaces such as playrooms and quiet rooms, shall be domestic in design and ambience (whilst ensuring that measures to reduce the risk of transmission of infection and increase safety are not compromised). Public areas such as waiting and reception areas shall be restful, open and be well lit with natural light as far as is practicable. They shall, as far as reasonably practicable, have views out to landscaped spaces that add quality and orientation.

The design shall allow for an open and friendly environment, but shall ensure privacy and dignity for patients, family members and visitors when required. To achieve this, the following features shall be incorporated:

- a) The ability for patients to see staff working within each section;
- b) The ability for staff to observe patients easily from the Touch Down Base;
- c) Where appropriate, glazed panels to have privacy control;

- d) Doors to all rooms inpatient single rooms shall have large viewing panels with privacy control:
- e) Wards and Units shall function as dedicated patient care areas and must not be designed for use nor used as thoroughfares for access;
- f) Facilities shall be sensitive to the cultural, religious and spiritual needs of patients, family members, visitors and staff;
- g) All non-clinical areas shall be designed to limit incursion into the clinical areas; this may be achieved by separate service entrances;
- h) Reception areas shall be easily accessible to visitors upon entry to the ward, department or unit;
- Reception areas shall facilitate dialogue with visitors of varying heights e.g. children, wheelchair users, adults, whilst maintaining staff security and privacy across the reception desk;

Wards shall be designed to maximise the efficiency of working arrangements, ensuring minimal travelling distance whilst treatment is being carried out at bedside and in clinical treatment areas within the ward environment.

Washing and toilet facilities shall be located within bed areas, and sited to allow maximum visibility into the rooms. Visual and acoustic privacy must be positively addressed in the case of shared facilities within bed bays. All washing and shower areas shall be designed to minimise the spread of infection, and meet accessibility codes, for example large doors which open outwards.

A suitable and appropriate, continuous machine cleanable floor surface is required. Refer to paragraph 5.13.2 for flooring.

The use of curtains shall be minimized wherever possible to control infection by utilising screens/blinds within glass which can be operated without touching the blind.

The location of patient entertainment systems shall not be obtrusive.

It is anticipated that ward layouts will maximise views, particularly from bedrooms. Sight lines shall be optimised for all users to enable outward visibility with consideration being given to sill heights. Windows on the ground floor will require special attention in relation to privacy and security. Account shall be taken of external environmental conditions, such as stronger winds at higher levels and window designs shall manage and control these environmental effects. The Board welcomes innovative designs and diverse approaches such as wheelchair and baby-buggy height windows which are inherently safe. Window design and specification must meet the requirements of The Building (Scotland) Regulations 2004 and its amendments and adhere to all relevant minimum NHS Requirements.

Project Co shall provide covered areas, which can be used year-round, as amenity and play space. Project Co shall provide seating and furniture in these areas.

Parents/relatives/carers normally need to take time off work to be with their child/family member in hospital. Access for them to resume normal activities, while remaining close to their child/family member, must be demonstrated within the design, e.g. internet access in quiet internal and external areas for carers.

The internal finishes must be effectively and expertly designed and co-ordinated, and furnishings, furniture and equipment must be of high standard. User representatives, via the

Board's Representative must be consulted at appropriate points throughout the design, construction and operational phases to ensure that the processes and solutions are responsive to specific needs, both operationally and aesthetically, as well as maintaining corporate requirements all in liaison with the Board's Project Team.

## 3.2.2 Light, Colour & Texture

Colour, decoration, works of art and motifs shall be used to facilitate identity of the Facilities; and its designated areas / zones and in addition improve wayfinding. It also shall be used to create an immediate and distinct 'image' of the Facilities to visitors, which is interesting and stimulating. The use of colour shall be co-ordinated with the lighting and be appropriate for the activities in each area; toned down in certain areas e.g., recovery, rehabilitation and quiet areas; but bright and stimulating in others, such as waiting and corridor areas.

Project Co shall propose the colour scheme and any choices available, details of which shall be submitted to the Board for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement.

The design shall provide quiet, comfortable areas with pleasing outlooks easily accessible from clinical areas where patients and their families / visitors can "escape" from the clinical environment. Such areas may facilitate informal discussions with health professionals in the future, and be equipped for play / recreation.

The effective use of light is an essential component of the hospital design. Light should be used both creatively within the building and also externally to light the building and create a sense of presence and beauty. The external lighting is to be designed to illuminate main entrances to the building, for wayfinding in the dark and to promote external design features. The use of external lighting to enhance security arrangements is essential.

The use of both natural daylight and artificial light should contribute towards a high quality environment and also be energy efficient. It shall be possible to adjust lighting for reading, close and clinical work, to suit mood and condition of patient, time of day etc. Emergency lighting is required throughout the Facilities.

Natural light should be provided in public spaces and in occupied private and staff spaces within the building as far as is practicable. Natural and artificial light sources shall be designed to avoid glare and thermal gain. Changes in level shall be well lit and abrupt changes in illumination should be avoided, unless specified as a clinical requirement. Glare on reception desks, signs and notice boards must be avoided. Artificial lighting layouts particularly, but not exclusively, along areas of circulation, shall be designed to avoid the creation of a stroboscopic lighting effect.

Deep plan spaces may prove necessary in certain circumstances. In such cases, the layout must be relieved by the penetration of daylight and sunlight from adjacent courtyards or roof and light shafts.

# 3.2.3 Internal Spaces

All internal spaces shall be planned in accordance with the requirements of the Specific Clinical Requirements at Sub-Section D with the appropriate adjacencies and layouts.

Some spaces shall be designed to encourage social interaction for patients, visitors and staff.

Public spaces shall be used to integrate the various parts of the building, and shall be designed to avoid being a space joined by long, narrow corridors.

## 3.2.4 Internal Wayfinding

Design solutions shall incorporate an integrated, comprehensive wayfinding strategy that enables patients, visitors and staff to self-navigate with ease and lack of stress throughout the buildings.

The integration of works of art into the wayfinding strategy is encouraged by the Board.

The wayfinding strategy shall be designed to meet the needs of staff, patients and visitors. Routes shall be clearly defined to ensure that parts of the buildings that are restricted to staff are not used as short cuts by patients and visitors. The use of enclosed internal courtyards as an integral part of a route shall be considered.

Internal signage shall be easily understood and consistent throughout the journey from the entrance to the department reception and on to rooms. It shall not create a clutter and the use of pictograms and graphic art is encouraged.

Proposals should be developed which acknowledge the multi-sensory process used in wayfinding and which address the needs of people with impairment in touch, smell, sight or sound.

The wayfinding strategy shall embrace the Identikit toolkit guidelines published by NHS Scotland and be able to interface with what is in use within the Campus Site and Bioquarter Site.

#### 3.3 Urban & Social Integration

## 3.3.1 Sense of Place

The Facilities shall be designed to complement and enhance the quality of the design in the locality in which it is sited. It shall create a welcoming, inclusive and vibrant environment, and shall enable easy access by the communities and groups who will use it.

The Facilities shall be organised to establish a continuity of building frontage and a clear definition of public and private spaces. When approaching the building the viewing of service areas or more "industrial" looking parts of the Facilities shall be avoided.

## 3.3.2 Neighbourhood & Community

Project Co shall ensure they are considered a responsible 'good neighbour' throughout design, construction and operation periods. The Facilities shall add value to the neighbourhood and wider community, and not detract nor be a nuisance or a burden to the environment.

The design shall reflect the importance of the Project in healthcare terms and it shall be seen as a leading edge community resource reflecting the objectives of a modern NHS.

Project Co shall provide Facilities whose overall visual impact contributes to improving civic design, and is sensitive to their relationship with the surroundings.

Careful consideration shall be given to the height of the buildings in relation to adjacent developments.

#### 3.3.3 Site Fit

New buildings, parking areas, other infrastructure and services shall be located with regard to the existing landscape and topography. Amenity space shall be planned around the buildings at appropriate places.

The design of the Facilities shall identify areas of the Site as possible expansion zones.

## 3.3.4 Hard & Soft Landscaping including Garden Spaces

Project Co shall design, as an integral part of the Facilities, a hard and soft landscaping scheme that will enhance the environment of the Facilities.

The landscaping scheme shall be of a high quality and shall assist in knitting the Facilities into their surroundings. It must also provide an interlinked network of attractive public spaces for amenity and circulation for use by patients, staff and visitors.

These will form an essential clinical part of the external environment, and must be integrated with the other aspects of the external environment, building entrance areas; car parking; access roads; pavements / footpaths; and service / delivery areas. The landscape design should support and enhance the separation of pathways of pedestrians, public vehicles and delivery vehicles.

The soft landscape design and choice of plants should assist in providing a therapeutic environment and be sympathetic to the character of the existing landscape.

External hard and soft landscaping (including courtyards) shall be designed for therapeutic use and provide patient's, staff and visitors access. The landscape scheme shall facilitate security of pedestrians and avoid 'No-Go' areas. A comprehensive and integrated landscape strategy shall be developed for appropriate formal and informal treatment of public and private areas.

Project Co shall provide all the external equipment required for the external areas. Details of the extent, type and location of such equipment shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. Notwithstanding the foregoing, the Board reserves the right to fund specific equipment from Charitable Funds and depending on the type of specific equipment thus funded such equipment shall be governed by Schedule Part 11 (Equipment Schedule).

## 3.4 Citizen Satisfaction

# 3.4.1 Design Concept

The visual forms shall enhance the sense of place and shall exploit to best advantage the environmental qualities of the Facilities and the Retained Site and the Retained Estate.

## 3.4.2 Scale & Proportion

Appropriate scale and proportions shall reflect the human scale, suitable for child and adult users of the hospital, adjoining urban surroundings and the existing buildings / structures at the Campus Site. Plant rooms, lift, stair towers and the helipad shall express form and function, but they shall not be perceived as dominating and oppressive.

## 3.4.3 Composition

The composition of the buildings shall be complete, cohesive and well balanced in massing. The visual form shall enhance the Site and sense of place.

The overall form of the buildings shall be designed to demonstrate the individual functional needs of each part of the Facilities. These parts shall harmonise with each other and the overall site, and the concept of facilities for different age and patient groups with distinct identities shall be fully explored by Project Co.

#### 3.4.4 Aesthetics

The overall visual form of the buildings shall combine good standards of space, height, form and scale. The form of the building shall appeal to the aesthetic senses of patients, visitors and staff as follows:

- a) The lines of the design shall clearly define forms and surfaces of the buildings;
- b) The skyline shall reflect the mass of the buildings but not be out of scale and dominating;
- c) The sky line shall not be monotonous.
- d) The solid forms shall be in scale and have harmonious shapes; and
- e) The interplay of light and shade shall add to the definition of the building form and the balance between solid and glazed elements needs to be incorporated into the design.

#### 3.4.5 The Arts

The Board will be entitled to approve the whole art content in the Project and Project Co shall submit any artwork to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement before any art work is commissioned.

Project Co is required to demonstrate how art is an inherent element of the design and how it has been integrated into the building fabric such that there is differentiation between the identities of the RHSC, CAMHS and DCN areas.

The incorporation of art, its use for way finding and the enhancement of the overall therapeutic environment must be an essential requirement of the design. Work has been initiated by the Board to develop an arts strategy to support the design of a hospital, and its environs, that will promote health and wellbeing. In consultation with the Board, Project Co shall carefully consider the outputs from the 2010-2014 charitably funded Artists in Residence Programme

within the RHSC and CAMHS. Documents relating to the Board's arts requirements are set out in the Disclosed Data. Project Co shall provide and install the art.

Project Co shall give careful consideration to the co-ordination and siting of artwork, so that it is multi-age appropriate, child-safe and interactive. Project Co shall ensure that all artwork conforms to the infection control standards appropriate to its location. Integration of artwork within the interior design should enhance identity at all levels – Facilities wide, departmental, main public spaces and circulation routes. To facilitate the utilisation of walls and other surfaces as art or for art, the design and positioning of engineering outlets, controls and sensors requires particular consideration. The internal wall construction and surface finishes within the Facilities shall allow for the flexible display of Artwork. Project Co's lighting design shall include for the use of illumination and spotlighting of the artwork features, or as art itself.

Project Co's design shall provide space for:

- Live arts performance and associated forms of presentation;
- The display of artwork created by children in RHSC and for the display of art competition work
- Health promotional events; and
- Public events, appeals and merchandising for fundraising / charity promotions.
- Artworks to be displayed on a rotational basis.
- Project Co shall ensure that the Facilities, where appropriate, incorporate innovative design and artworks as an integral part of the Facilities. Project Co shall:
  - a) Create and designate spaces within the Facilities (both internal and external) which will be appropriate for the integration of artwork into the designs, and ensure that these locations incorporate suitable building services and the relevant parts of the Facilities are suitably designed and constructed in all respects for the provision for placing or fixing such items such that they are displayed to their best advantage;
  - Liaise with the Board (or nominated representative) as ideas for arts are developed in conjunction with service users and staff, and, in conjunction with the Board, identify a shortlist of suitable artists that works may be commissioned through; and
  - c) Commission such artists whose artwork has been submitted to the Board as Reviewable Design Data and approved by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, and take full responsibility for ensuring their works are integrated into the Facilities, also ensuring that the contractor and designers involved are integrated into this process from the outset such that the creative opportunities are maximised and that functional, cost and arts programme issues are anticipated and resolved.

Project Co shall take an active and supportive role in implementing an arts and environment programme for the Facilities.

Project Co's design shall integrate such artwork features as are being transferred from the Existing RHSC and Existing DCN into the overall design philosophy for the Facilities. A schedule of the large and heavy items to be transferred, including those items to be built into

the new building fabric, is detailed in the Disclosed Data. A schedule detailing the more portable items to be transferred is included in Schedule Part 11 (Equipment Schedule).

The artworks proposals shall embrace (where applicable) the Identikit toolkit identity guidelines published by NHS Scotland.

#### 3.5 Uses

## 3.5.1 Service Philosophy

The service philosophy is contained in Sub-Sections D and E of Section 3 of this Schedule Part 6.

The design shall deliver a solution, which fully reflects the special needs for each patient group whether they be attending hospital on a planned or on an unplanned basis. Clinical activity is considered further under these headings:

- a) Unscheduled Care;
- b) Scheduled Inpatient care;
- c) Out-patient and Medical Day Care;
- d) Critical Care Services;
- e) Theatre and Day Surgery;
- f) Clinical Support Services;
- g) Child and Adolescent Mental Health Service.

These are detailed in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

The Project shall promote integrated ways of working and delivering services for both primary and secondary care, and for the NHS, local authorities and other community based services.

# 3.5.2 Clinical & Non Clinical Functionality

The Facilities shall be designed to accommodate the Clinical, Non-Clinical and other functions ascribed to them in terms of space, environment and the efficient and safe operation of equipment, as defined in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

The design of the Facilities shall:

- a) Function efficiently, effectively and economically to achieve the optimum balance between capital cost of the Facilities and the Board's operating costs and to meet and satisfy all of the requirements and obligations set out in these Board's Construction Requirements to ensure that the Facilities are sustainable well into the future and as a minimum for the whole of the Operational Term or to meet the Handback Requirements, whichever is the longer period;
- b) Demonstrate that the design fully reflects the special needs for each patient group in terms of access, functional relationships and planning;

- c) Interface easily with other service providers in particular the wider services provided by the Board:
- d) Foster the provision of patient-focussed acute services; and
- e) Permit and encourage service integration across the care spectrum/community.

The design shall be able to do this in terms of environment, scale, comfort privacy, reassurance, style and security.

# 3.5.3 Design for Therapy

The Board places a high priority on how the design of the Facilities impacts, both mentally and physically, on the treatment experience for patients, families, visitors and staff. It is therefore essential that Project Co develops a clear strategy which is interpreted through the design of the Facilities and focuses on providing an environment that takes every opportunity to enhance the experience of every person who comes in to contact with it.

This paragraph 3 shall be read in conjunction with the requirements for infection control. Whilst it is expected that there is a balance to be drawn between design for therapy and infection control requirements, the requirements of one over the other shall not preclude the use of well thought out design and good quality solutions.

# 3.5.4 Patient Privacy and Dignity

To achieve appropriate levels of privacy, Project Co shall provide Facilities which allow adequate space around patients. This may include space for families, and other visitors to sit with patients, adequate space between chairs, and seating in rest bays along corridors to provide rest places along the route of the patient / visitor journey. The privacy afforded to patients, staff, families and visitors shall not be compromised by inappropriate or inadequate sound reduction measures in the design or in the build standard.

Sill heights for windows shall enable outward visibility, in particular for children, patients in wheelchairs and in beds. Special consideration shall be given to the needs of those with impaired mobility and those with poor sight. Some doors and internal glazed screens shall require vision panels or other glazing systems, which may be obscured or controlled for privacy. The ability to use vision panels which allow objects / small children on the other side to be viewed are required in those areas as defined in the Room Data Sheets.

## 3.5.5 Age Appropriate Care

The age range of children routinely attending the RHSC paediatric facility will be 0-16 years, and a number of young people aged from 17 to 18 years of age also will attend. CAMHS patients routinely attend until they are 18 sometimes older therefore the building, particularly within the Inpatient areas, will offer a variety of facilities to meet the needs of infants, pre-school age, 5-10 year olds, 10-13 year olds and 13-16/18 year olds. Adolescents in RHSC have access to a social space designed especially for this age group, CAMHS inpatient areas are to accommodate 12-18 years olds. The DCN facility provides services to adults.

Age specific facilities will be provided within the appropriate areas.

## 3.5.6 Single Room Accommodation

DCN and CAMHS will have 100% of inpatient spaces in single rooms, and in the RHSC approximately 59% of inpatient spaces will be in single rooms, which will facilitate the management of the privacy and dignity of patients and families, and infection control.

Challenges for the design of single room accommodation, particularly within longer term inpatient facilities, includes many adolescents preferring to be in a single room for privacy, however consideration is to be given to provide additional space for social, educational and IT facilities.

# 3.5.7 Functional Relationships

The design shall offer all users of the Facilities the highest level of efficiency in their operations by way of relationships and adjacencies between functional units.

The general inter-relationship of wards and departments is fundamental to good design, ensuring patients and families can receive effective care and that staff can go about their business efficiently.

The grouping and disposition of departments shall take into account the importance of enabling easy flow of the three main groups of traffic:

- a) Patient, family, visitor and staff traffic arriving at the hospital;
- b) Patients' and staff traffic between clinical departments (in and out patient areas) and central diagnostic departments, particularly theatres and radiology.
- c) Service traffic good design will ensure that distances for service traffic are kept to a minimum with innovative use of vertical routes e.g. service lift;

#### 3.5.8 Work Flows & Logistics

Workflows within and between departments shall be direct and the routes for patients and staff as short as possible. Internal traffic cross-flows which could be inefficient or conducive to the transmission of micro-organisms either through airborne or other means shall be minimised.

The movement of people and the distribution of supplies and waste shall be carefully considered. Circulation routes shall be clear and appropriately sized.

Patterns of movement within the hospital shall be clear, unambiguous and logical for patients, families, visitors and staff. The adjacency patterns will minimise travel time and distances for patients, families, visitors and staff, with clear and coherent signposting to support a natural flow of pedestrian traffic.

Use shall be made of art in creating focal points, and supporting wayfinding both for internal and external areas.

The route for patients to be taken to the RIE Facilities and RHSC Emergency Departments from the helipad is through the Hot Core. There is to be a controlled link to the RIE Facilities from the ground and first floors of the Facilities building.

All signposting and instructions must be readily accessible and capable of being understood by the community that the hospital serves.

Provision is to be made for deliveries being accommodated at a loading area / bay. These will arrive in a range of different vehicle types, and the deliveries will be off-loaded into an adjacent Goods Receipt Area. Provision is also to be made for mail to be delivered directly into a Mail Room, catering supplies delivered directly into a Catering Store, and linen will be delivered straight into a linen store.

## 3.5.9 Manual Handling

Project Co shall ensure that the working environment of staff shall be designed in such a way that where they are required to manually handle inanimate objects / patients and / or transport patients, due consideration shall be given to the obligations within the Manual Handling Operations Regulations 1992 (as amended). This shall extend to the provision of mechanical devices including fixed (i.e. ceiling mounted tracking hoist systems) or mobile hoists including appropriate allocation of space and structural capacity.

## 3.5.10 Adaptability & Expansion

Project Co shall ensure that the physical arrangement of the buildings allows for growth and change of Clinical Services in the future, as far as is practical. The provision for such are detailed in the Adaptability Strategy.

The design shall consider the means for departments to be used flexibly, adapted or expanded. National policy, clinical advancements and technological changes will impact on the way services are provided in the future, and the Facilities need to be sufficiently flexible to handle these advances. The design shall demonstrate that potential change or expansion has been considered by the provision of adequate space either at the external perimeter and / or between functions and departments.

The structural grid, construction technique, structure, service penetrations and engineering services strategy shall demonstrate that the design proposals for expansion, adaptation and flexibility are co-ordinated.

The provision of engineering, telecommunications and building services shall be appropriate for the provision of anticipated changes in medical equipment.

The architectural flexibility shall reflect the overall Adaptability Strategy.

Project Co shall ensure that the design of the internal enclosing walls, screens and ceilings and their relationship to the environmental servicing strategy present a co-ordinated and consistent approach throughout, capable of accepting change at a later date with the minimum of disruption to the building structure and main mechanical and electrical plant installations and associated services.

Project Co shall ensure that the Facilities' structure and envelope, services, partitioning, ceiling, and flooring systems are consistent with a co-ordinated methodology which facilitates future flexibility for re-planning and change in the layout of departments, rooms, services outlets and equipment.

The internal divisions and environmental servicing strategy shall provide a co-ordinated and consistent approach throughout and shall readily accept change with the minimum disruption to the building structure and main mechanical and electrical and plant installations. In particular, it shall be possible to install or relocate fittings, fixtures, equipment and service outlets with minimum disruption to the use of the Facilities.

Building structures shall be designed by Project Co to facilitate ease of alteration to the internal layout of the buildings, or to its plant, services or equipment, during the lifetime of the buildings. This shall be achieved by:

- Selecting structural forms in which future builderworks holes for building services distribution, both vertically and horizontally (including ductwork), or equipment, may be cut simply and economically and maintaining the fire safety integrity without significant additional work;
- b) Providing knock out panels to permit the formation of holes not exceeding 150x150mm through suspended floors, adjacent to 50% of the internal columns on all floors. These knock out panels shall be positioned close to columns distributed across all areas of each floor;
- c) Designing the floors for imposed loadings that will permit the reallocation of space within the Facilities, so that each area of floor is structurally capable of supporting the imposed loads of offices, wards, corridors, general storage areas or waiting areas, together with their appropriate partition walls, finishes, ceilings, services and medical equipment;
- d) Providing removable access panels within the structure, where these are required for the installation, maintenance, repair and removal of plant, services or equipment;
- e) Constructing internal room walls such that they can be readily removed or altered i.e. the structure is not reliant on the walls for structural stability; and
- f) Designing plant space and riser space so that future change can be accommodated.

Project Co shall ensure that the Facilities do not have perimeter upstand beams and all perimeter beams shall be designed to allow a clear 300mm services zone above the ceilings and below the perimeter beams, unless otherwise agreed with the Board.

# 3.6 Spaces

## 3.6.1 Floor Layouts

The design of departmental and unit layouts shall reflect the demand for space defined by occupancy and usage as described in the Board's Construction Requirements Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), Sub-Section E (Specific Non Clinical Requirements). Where areas and shape of rooms results in undesirable spaces, Project Co shall discuss with the Board alternative solutions, which may or may not result in shared space providing a more appropriate environment as well as optimising the available use of space. These may include locker rooms, sitting areas, seminar rooms etc

## 3.6.2 Equipment Requirements

Project Co shall identify and provide all necessary connections and infrastructure (including supply, extraction and removal of waste) for all items of equipment identified in Schedule Part 11 (Equipment Schedule). For the avoidance of doubt, this obligation specifically includes specialist service requirements, including for example 3-phase electrical supply, surge protection, special water supply requirements and separation of contaminated waste.

Project Co shall provide a suitable environment for each item of equipment; this shall take into account lighting, temperature and ventilation requirements. Project Co shall design the Facilities to allow for the provision and safe use of the Group 1, Group 2A, Group 2B and Group 3 Equipment.

For reasons relating to standardisation, compatibility, staff familiarity and product quality the Board shall be entitled to choose items of equipment which shall be proposed and submitted by Project Co to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Irrespective of the party responsible for the supply, installation, maintenance and replacement of each item of equipment (as detailed in the Schedule Part 11 (Equipment Schedule)), Project Co shall provide Facilities that satisfy the following criteria:

Allow equipment and associated systems to be installed, commissioned, operated, maintained and replaced in accordance with;

- a) Good Industry Practice;
- b) Manufacturer's instructions;
- c) The Board's specific supplementary requirements; and
- d) The Board's, and statutory health and safety requirements;

#### In order to:

- a) Allow equipment and associated systems to operate efficiently, effectively and in accordance with their intended function for the whole of its design life;
- b) Take due account of the impact on the environmental conditions within the Facilities. For the avoidance of doubt, this obligation includes (but is not limited to) impact of heat gain and loss, and ventilation; and
- c) Take due account of the potential impact of future equipment changes through either updating or replacement. In particular, allowance for equipment of different sizes, weights, service requirements or environmental impacts.
- d) Allow the Board to provide their Clinical Services and Non Clinical Services with a minimum of disruption during installation, commissioning, operation, maintenance and replacement.

A number of specialist engineering systems will be required within the Facilities and each shall be fully integrated within the design proposals. Specialist systems shall be incorporated where appropriate to enhance the operation of the equipment and the Facilities.

The construction, structure, plant and services shall be designed to meet the Board's Construction Requirements and the specific requirements for special equipment and associated services. The design of the Facilities shall meet these requirements with regard to wall, ceiling and floor loads, structural movement and deflections, the need for special floors, wall and ceiling supports, ceiling grids and other such measures to allow for the installation of special equipment and associated services.

#### 3.6.3 Room Data Sheets

Project Co shall provide Facilities that, as a minimum, meet all the requirements specified in the Room Data Sheets included in this Schedule Part 6 Section 6. Room Data Sheets not included in Schedule Part 6 Section 6 shall be provided through RDD.

Project Co shall provide fully developed Room Data Sheets submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

As part of the commissioning process, Project Co shall be responsible for demonstrating compliance with the requirements included within the Room Data Sheets.

For the avoidance of doubt, Project Co shall provide mechanical ventilation, comfort cooling and air conditioning to suit the functional requirements of each of the rooms in the Facilities. Irrespective of the ventilation requirements in Room Data Sheets, where rooms are clearly intended to be occupied and / or become internal spaces during design development and natural ventilation is not possible, mechanical ventilation and / or extract ventilation shall be provided as appropriate to suit the function of the space.

# 3.6.4 Interior Design

Project Co shall develop an interior design strategy to cover all areas of the Facilities and shall present this to the Board for its consideration. The integration of works of art is considered by the Board to be an essential element of any such interior design strategy.

Proposals shall be presented by Project Co in room-by-room schedules with samples of finishes, colours, lighting fittings, materials as appropriate, and signage, supplemented by colour sketches or coloured computer images submitted to the Board for review in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and\_clause 12.6 of the Project Agreement. Project Co shall agree with the Board a programme for submission of this information allowing sufficient time for consultation with the users, and for incorporating feedback into the final scheme.

Where Project Co includes internal planting displays, these must comply with the Board's infection control requirements, and associated irrigation and atmospheric controls shall be provided.

#### 3.6.5 Space Standards

"Many factors can contribute to engendering a sense of ease, for instance:- the degree of natural light, brightness and airiness, colour and texture, an easily understood layout with clearly defined focal points, uncluttered signage and a clear distinction between the realms of public and private space, maintaining patient dignity".

#### **SEHD 2006**

Project Co shall provide designs which are efficient, economical and flexible for immediate and future use, and which can be managed efficiently to cope with seasonal and strategic variations in activity.

The internal and external space provision shall be equal to or greater than that prescribed in codes of practice, regulations and guidance related to hospital buildings.

Appropriate space provision shall be made for circulation, waiting and sub-waiting space and for the movement of patients, pedestrians and the storage and transportation of goods.

Individual departments shall be designed to allow formal and informal discussion, therapy and interaction within each clinical environment - such as in consultation rooms, therapy and rehabilitation rooms, waiting areas and receptions. The design shall also support the creation of a learning environment for informal and formal teaching of staff, students, patients and their families.

Project Co shall provide space to allow informal discussion, therapy and interaction within open and reception areas in the clinical environment, such as areas of rehabilitation, consultation and main waiting / reception areas. Consideration shall also be given to making use of open

areas such as courtyards and corridor recesses within clinical areas and main circulation routes for 'break-away' space.

Project Co shall recognise that the perception patients' and staff of the spaces created may assist with their feeling of belonging and of not being intimidated, and may help with their orientation, mobility, confidence, privacy and their ability to socialise.

# 3.6.6 Ward Configuration

Where required, wards shall be configured to meet the requirements of single sex wards providing privacy and dignity to patients.

The layout of the wards shall facilitate the separation and zoning of patients into clinical groups to respond to seasonal variations in activity, case mix, and practice and to deal with infectious conditions.

Space around beds shall comply with Department for Health Adult in-patient accommodation: Planning and design manual: Version 2.5: England and HBN 23 Hospital Accommodation for Children and Young People (2005) providing adequate space for health care professionals, teaching requirements, visitors and multi-pieces of equipment to be located near to the patient within the bed area. Additional space shall be allowed for engineering and building services zones. There shall be a minimum of 3.6m between bed centres.

The Touch Down Bases are sited throughout the clinical ward area to ensure optimum observation of patients and equipment in single and four bedded wards. The ratio of Touch Down Base should be 1:4 beds depending on design of ward.

#### 3.7 Security & Control

Security of patient, staff, families and other visitors is of utmost priority. The design of the Facilities shall ensure maximum protection and minimise exposure to crime in internal and external areas.

Special care shall be given by the Project Co to the control and monitoring of access points used by the public and staff from public circulation spaces particularly those which may be quiet and sparsely populated during out-of-hours services.

Particular attention shall be given to the security of routes used during the hours of darkness by staff between pedestrian access points to the Site, car-parking areas and entrances to the Facilities.

Access control systems shall be provided to restrict access to certain areas of the hospital to relevant staff members, patients and visitors as appropriate in paragraph 9.19. Access controls shall be based around the following requirements:

- a) Provision of high resolution CCTV or appropriate technology at all entry and exit points, reception areas, main entrance and such other areas as are defined in paragraph 9.19;
- b) Systems to provide of out-of-hours security infrastructure to accommodate varying working hours, particularly evening and night-time working;
- c) Security systems that are consistent with other Board facilities and policies, including main door or departmental access systems linked to staff identity badges;

Points of entry and reception points shall be minimised and allow for natural supervision and/or monitoring of movement and entry.

There shall be minimal isolated vistas and dead-end spaces to design out the potential for crime. The provision of security lighting must be effective and efficient but not overbearingly bright.

Design of roadways, paths and parking areas shall take into account the safety of staff, patients and the public. Landscaping will soften the hospital site, be attractive and calming but be designed with security and safety in mind.

External areas and courtyards must be safe, secure and capable of being used in varying weather conditions.

All external access routes and entrances to the Facilities shall prevent the risk of wind funnels.

# 3.7.1 Secured by Design

Project Co shall meet the requirements of "Secured by Design", and in particular the recommendations of the Secured by Design - Hospitals guide.

Project Co shall endeavour to ensure that their approach to security and control of the Facilities will be structured in a way which will allow the Board the flexibility to seek compliance with the requirements of the Secured by Design initiative at a later date.

## 3.7.2 Safer Parking Scheme

Project Co shall where possible adhere to the principles of the British Parking Association's Safer Parking Scheme Documents and Guidelines.

Project Co shall endeavour to ensure that their approach to security and control of the parking facilities will be structured in a way which will allow the Board the flexibility to seek compliance with the requirements of the Safer Parking Scheme initiative at a later date, and achieve the "Park Mark Safer Parking Award". Safe routes for pedestrians should be incorporated.

## 3.8 Site Access & Circulation

A traffic assessment has been undertaken on behalf of the Board to ascertain and evaluate the impact of the development on transport patterns. Project Co shall validate the recommendations of this report and secure agreement with The City of Edinburgh Council for its proposals.

The Board requires to see, as far as reasonably practical, the clear separation of access for services, supplies, and waste removal vehicles from patients' and visitors' access points and entry points for the Facilities. In addition as RIE is an operating hospital adequate access to the RIE must be maintained at all times during construction and operation of the Facilities.

In the planning and design of the Facilities and of the Site layout, Project Co shall endeavour to ensure as far as is reasonably practical that routes used by pedestrians are segregated from routes used by moving road vehicles and any tug trains or similar deployed in the operation and maintenance of the Facilities. Project Co through the location of suitable external seating shall provide "rest areas" in safe positions along the main pedestrian routes.

External wayfinding shall be consistent with the principles currently adopted on the RIE Site, and Bioquarter Site or as modified at some future date, and be appropriate for the different age range of patients involved.

For the RHSC Paediatric facility there will be separate entrances required for the following departments:-

- a) For the Emergency Department (ED);
- b) Main hospital entrance for patients, staff and visitors;
- c) Child and Adolescent Mental Health Service (CAMHS);

#### Clinical Neurosciences

- a) Route for emergency patient transfers via RIE Facilities Emergency Department;
- b) Main hospital entrance for patients, staff and visitors;

The defined routes for construction plant and construction access roadways shall comply with the provisions of paragraph 4 and Appendix A.

Project Co shall undertake all necessary works associated with the following specific requirements:

## 3.8.1 Design for Disability

The design shall comply with the requirements of the Equality Act 2010, and take full consideration of HBN 00-02 "Sanitary Spaces", SHFN14 "Disability access", SHFN20 "Access audits for primary healthcare facilities", HFN 21 "Car Parking" and Standards of Care for Dementia in Scotland: Action to support the change programme, Scotland's National Dementia Strategy. Further guidance is provided in BS 8300:2009 Design of buildings and their approaches to meet the needs of disabled people - Code of practice.

Doors and lifts are required to be of a width and length to allow wheelchair access (often with additional attached equipment) and patients being transferred on trolleys and beds with attached clinical equipment, and this is also essential for children being transported in prams and buggies. Automatic doors along patient pathways are essential to ensure that staff pushing patients and /or equipment on trolleys, wheelchair users and parents/carers with children in prams/buggies can move rapidly and smoothly. Automatic doors will improve access for wheelchair users, those with reduced mobility, impaired vision and other disabilities. Automatic doors will minimise damage caused to doors and walls by trolleys and cages.

Entrances to the Facilities shall be clearly identified to promote ease of wayfinding and distinctive 'landmarks' shall be incorporated into the design particularly for the main entrances.

The Facilities' environment, both externally and internally, shall be designed to be accessible to everyone. The journey on to the Site, from pedestrian / vehicle routes, through the main receptions, into the Facilities and to the desired locations shall follow a safe, logical and clear system.

Attention shall be paid in the design to all aspects of the physical environment relating to the accessibility of the Facilities as follows:

a) Access to buildings, such as level or ramped entry;

- b) Emergency evacuation arrangements, in particular for the visually impaired, the disabled and the frail, such as fire refuges or alternative escape routes for people with mobility impairments;
- c) The accessibility of external paths and landscaping and the location of "rest areas" on all external routes:
- d) Circulation within buildings, including their interior layout;
- e) Effective lighting and signage and colour or tone contrast on doors to aid orientation;
- f) Desks, laboratory benches, work surfaces and reception desks with varying or flexible heights;
- g) Appropriate seating;
- h) Accessible toilets; and
- i) Convenient but controlled 'free' proximity parking.

Project Co shall ensure that the Project design draws upon and endeavours to further develop improve and exceed current best practice and standards achieved in other similar projects, and incorporates full accessibility for the prospective patient groups, staff and public. This shall include aspects of both physical environment and visual and audio aids to enable full and unrestricted use of the Facilities for all groups. This philosophy of design shall be extended across all parts of the Facilities including access to the landscaped and external areas as well as the essential patient treatment and residential areas.

Project Co shall ensure the design complies with the general accessibility ethos detailed above, whilst also addressing the detailed requirements listed elsewhere. It shall be noted that the requirements detailed are not exhaustive, and it is also recognised that specific clinical needs will determine the nature and design of Facilities in some areas.

In particular it is highlighted that the Facilities will be used by a high proportion of wheelchair users. Project Co shall ensure that the fire strategy and design of the Facilities take full account of this.

In meeting the overarching obligations with respect to accessibility, Project Co shall comply with the following non-exhaustive list of standards:

- a) BS8300:2009 Design of buildings and their approaches to meet the needs of disabled people Code of practice;
- b) SHFN 14 Disability Access;
- c) SHFN 20 Access audits for primary healthcare Facilities; and
- d) HFN 21 Car parking.

BS8300:2009 "Design of buildings and their approaches to meet the needs of disabled people – Code of practice"; is also the document most widely referred to by consultants advising on general building design in relation to the Equality Act 2010. Project Co shall therefore refer to this document and give full regard to its standards. It will, however, be necessary to match the standards of BS8300:2009 "Design of buildings and their approaches to meet the needs of disabled people – Code of practice" with others laid down in NHS guidance notes.

For the avoidance of doubt, specific accessibility requirements listed in this Schedule Part 6 Section 3 shall take precedence over the standards laid down in BS8300:2009 "Design of buildings and their approaches to meet the needs of disabled people – Code of practice".

#### 3.8.2 Vehicular Access

Road widths, turning circles, waiting bays and lay-bys shall be designed so that they are suitable for hospital and emergency traffic including service vehicles and are designed for the convenience of staff and the public. These routes shall link the main access points on Old Dalkeith Road/ Little France Crescent to the principal vehicle routes and entrance points to the Facilities. It shall be noted that some of these routes may be required to connect seamlessly into and be compatible with roads, turning circles, bays and lay-bys which are outside the Site boundary.

#### 3.8.3 Pedestrian Access

Project Co shall provide routes to the Facilities and to adjacent parts of the Campus Site from Old Dalkeith Road and Little France Crescent which are safe and convenient for pedestrians and cyclists to use. These routes shall link the main access points on Old Dalkeith Road / Little France Crescent to the principal patient, visitor and staff entrance points to the Facilities. It shall be noted that some of these routes may be required to connect seamlessly into and be compatible with and reflect pedestrian desire lines and pathways which are outside the Site, subject to the requirements of paragraph 4, Appendix A and Clause 9 (Nature of Land Interests) of the Project Agreement.

Pedestrian routes to the building shall be as direct as possible to reduce the temptation to use or create unauthorised entrances and exits. Project Co through the location of suitable external seating shall provide "rest areas" along the main pedestrian routes.

Pedestrian emergency exits from the buildings shall be used for that purpose only and appropriate measures shall be taken by the Project Co to ensure that they cannot be used for accessing the buildings.

## 3.8.4 Cycle Routes

Special attention shall be given to the maintenance and extension of existing safe cycle routes. Project Co shall carry out works to form a cycle path and reconfigure the landscaped areas within the Yellow Area (Cycle Path Works) subject to providing a method statement for these works which method statement will form part of the relevant Interface Proposal, and complying with the requirements of Section 2 (Operational Construction Issues) and paragraphs 1 and 5 of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Access Strategy and/or where applicable any Access Strategy agreed and/or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A.

The reconfigured cycle path shall terminate at Little France Crescent and to the access to the Site from Old Dalkeith Road Project Co shall provide appropriately located bicycle security and staff changing facilities. It shall be noted that some of these routes may be required to connect seamlessly into and be compatible with existing cycle routes which are outside the Site boundary but within the Campus Site.

## 3.8.5 Emergency Vehicle Access

Project Co shall provide clear and well defined routes for emergency vehicles such as ambulance, fire and police. The Emergency Department access will require 2 distinct entrances: one for emergency patients and one for ambulant patients.

Ambulances will most frequently use the Emergency Department entrance and the entrance to DCN. Waiting and queuing of ambulances at these locations will require to be considered by Project Co.

The design of the Facilities by Project Co shall take into account the unimpeded continued routing of "blue-light" emergency ambulance traffic into the ED in the Facilities and the RIE Facilities and around the Campus Site. Special provision shall be made for manoeuvring, unloading and waiting of ambulances and other emergency vehicles at the Emergency Department for the Facilities and the RIE Facilities.

#### 3.8.6 Service Vehicle Access

Service traffic shall be separately routed to the loading bay area(s). Project Co shall provide a holding facility for three of the longest lorries to wait for access to the loading bay areas. Access to the holding area, VIE compound, energy centre and loading bay areas will be controlled as defined in paragraph 7.5 of this Sub-section C. In such areas safe segregated routes for pedestrians will be clearly identifiable and these will not be in conflict with vehicular movements.

## 3.8.7 Road Markings & Signage

Project Co shall undertake all necessary road, footpath and car parking markings and signage works within the Site boundary.

# 3.9 Car Parking & Drop-off / Pick-up

## 3.9.1 Car Parking

Car parking to replace the car parking spaces in Car Park B have been provided elsewhere at the Campus Site. Car Park F will provide additional car parking to meet the essential needs of the Campus Facilities.

Project Co shall provide a strategy for parking which demonstrates control of access to onsite and close proximity parking.

From the Actual Completion Date, Patients and Visitors to the Facilities will have access to Car Park E.

# 3.9.2 Emergency Department Parking

Project Co shall provide as a minimum 24 free spaces for emergency visitors to the ED for the Facilities and the RIE Facilities. Of these spaces:

a) 50% must be of a size for disabled or parent and child parking, and marked as appropriate.

b) 50% must be non-disabled spaces for short term parking for emergency visitors to the ED facilities.

These will be provided in a way that is clear to users that they are for short term stay and they will be located so as not to cause access issues elsewhere.

Access controls will be provided as detailed in paragraph 7.5 of this Sub-section C.

## 3.9.3 Disabled and Parent and Child Parking

The design of the Facilities shall recognise the importance of providing sufficient disabled parking spaces and drop-off points as close to the entrances as possible.

In addition to the disabled and parent and child parking provision at the ED, Project Co shall provide as a minimum:

- a) 40 free disabled parking spaces for RHSC indicating that they are for Disabled and Parent and Child Parking; and.,
- b) 20 free disabled parking spaces for DCN marked accordingly.

Access controls will be provided as detailed in paragraph 7.5 of this Sub-section C.

The design of the Facilities shall recognise the importance of providing sufficient disabled parking spaces and drop-off points as close to the entrances as possible.

#### 3.9.4 Drop-off / Pick-up Arrangements

Project Co shall provide designated, covered "drop-off / pick-up" area(s) directly adjacent to the principal entrances to the Facilities including the ED entrance. This shall allow direct access to the Facilities, for a wide range of vehicles including private cars, taxis, ambulances and patient transport vehicles. The design should discourage any other use other than drop-off in this area.

# **4 Site Specific Requirements**

## 4.1 Site Boundary

The Site is currently in the ownership of the Scottish Ministers and is part of the Campus Site.

Refer to other site boundary issues detailed in other parts of this paragraph 4 and paragraph 7 of this Sub-Section C (in particular paragraph 7.3).

#### 4.2 Travel Plan

In line with the Board's obligations under Policy Statement 3 of SEHD's "Environmental Management Policy for NHS Scotland", the Board will prepare a Green Travel Plan for the Facilities, which aims to reduce the impact on the environment of travel by staff, patients and visitors to and from the Facilities, and travel by staff during work at the Facilities.

The scope of this Green Travel Plan is in line with the Integrated Transport White Paper 'Travel Choices for Scotland' and 'Scotland's Transport: Delivering Improvements'.

Project Co shall assist the Board in developing the integrated Green Travel Plan to take account of the impact of the Facilities.

Project Co shall ensure that the proposals for Site access and circulation, pathways and car / cycle parking are discussed and agreed with the Board in the context of the Green Travel Plan.

Guidance is available within the SEHD document, 'Travel Plans: An Overview, September 2002'.

For the avoidance of doubt, the Board is responsible for the development of the Green Travel Plan.

## 4.3 Existing Services

## 4.3.1 RIE Enabling Works

The Board has identified the following enabling works (the "RIE Enabling Works") which will be required to be carried out on the Campus Site to meet planning requirements. These key enabling works will be carried out by or on behalf of the Board by or on behalf of Consort. These works do not form part of the Project and it is intended they are completed or substantially completed prior to any part of the Project commencing on Site. The key enabling works are described here for information purposes only and form part of Disclosed Data so that Project Co is aware of them and takes them into account in planning for the Project.

- a) Flood Protection Works: which means the enhancement of existing flood protection measures at the Campus Site;
- Road Infrastructure Works: which means changes to the road and transport infrastructure at the Campus Site, including but not limited to the creation of a public transport terminus to the east of RIE Facilities, new bus stances and revision of existing car parking;
- VIE Relocation Works: which means relocation of the existing VIE plant and gas governor serving the RIE Facilities to another location on the RIE Site. Separate VIE plant is required for the Facilities;
- d) Link Building Works: which means the building which is to be part of the RIE Facilities to which the new Facilities will be connected at ground and first floor levels;
- e) Service Diversion Works: which means the disconnection of certain services such as electricity, water, gas, that serve the RIE Facilities and are currently located on under or over the Site and such services which are disconnected will be relocated in positions outwith the Site to new positions within the RIE Site. However Project Co should note that not all redundant services are being removed and grubbing up of any disconnected and redundant services will be the responsibility of Project Co, as part of the Works. Project Co should have regard to the following services which are expected to continue to be present at the Site namely the county sewer (which it is believed runs from south to north in the western area of the Site) the storm water system (which serves Car Park B), the utilities services for the Nursery including water, gas, power, telecommunication and drainage, the Sewers referred to in paragraph 6.1.1 and gas pipe referred to in

paragraph 6.1.2; further the following services are expected to be present and possibly connected namely bases for medical gases, equipment, apparatus, pipes, conduits and the like relating to disconnected, non functioning and/or redundant services under the Site, manholes and slabs for parking equipment. Project Co shall carry out any protection and diversion works associated with any further existing services located within the Site but this list is not exhaustive and Project Co must satisfy itself as to the conditions of the Site. This may include (but not be restricted to) electric cables; telecommunications cables and equipment; gas mains and apparatus; sewerage mains / drainage pipes; and water mains;

- f) Sewer Diversion Works: which means the diversion of trunk sewers currently located in the Site to positions outwith the Site to new positions within the RIE Site save for a section of Sewer referred to in paragraph 6.1.1 which will continue to run under the Site; and
- g) Clinical Facilities: Reconfiguration/alteration of a number of clinical facilities within RIE Facilities:

#### 4.3.2 Flood Works

a) Off-Site Flood Protection Works – It is proposed to construct flood defence walls (approximately 1000mm high) to both sides of the Niddrie Burn in the Nether Craigour area upstream of the Old Dalkeith Road bridge to provide improved flood protection to dwellings at Little France Mills and to the Campus Site and Campus Facilities. These works will be procured under a separate contract and do not form part of the Project and are expected to be carried out in the areas shown on the indicative plan RHSC-DCN-FP-001 which forms part of the Disclosed Data.

#### 4.4 Demolition and Site Clearance Requirements

- 4.4.1 Notwithstanding paragraph 4.3 above, Project Co shall be responsible for the all demolition and site clearance of the Site including without limitation all structures such as the Nursery, services and removal of disconnected services. The work that Project Co shall carry out will include but is not limited to the following:
  - a) The identification and removal of all structures, including the Nursery, hardstandings and the like occupying the Site.
  - b) The identification and protection of live (and/or used) services in, under, on, over the Yellow Area, the Orange Area, the Service Strip, the Foul Service Strip, the Substation Site, Substation Access Area and the Substation Cable Route.
  - c) The identification, decommissioning, removal and / or protection / relocation of live (and used), live (and redundant) or redundant (and disconnected) services in, under, on, over, crossing the Site; and
  - d) The identification and removal of underground services, old foundations, drainage runs, basement structures and other below ground obstructions present following demolition of previous structures occupying the Site.
- 4.4.2 The Board has provided Disclosed Data. Whilst the Board believes that the information presented here is representative of the position on Site, Project Co is required to draw its own conclusions with respect to overall allowances required and

the accuracy of the Disclosed Data. Other obstructions, contamination and services not yet identified may be present at the Site.

- 4.4.3 Where in connection with the Project, Project Co requires to carry out any demolition, Project Co shall carry out all demolition in accordance with BS 6187:2000 "Code of Practice for Demolition" and the following:
  - a) Issue a method statement identifying the scope and methodology for undertaking the demolition works in Project Co's Proposals and to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement;
  - b) Break up and remove off-site all structures, foundations, temporary accommodation, and other below ground and surface obstructions in accordance with, but not limited to, BS5228, 2009 "Code of practice for noise and vibration control on construction and open sites.";
  - c) Decommission and / or break up and remove all redundant underground structures, chambers and redundant surface water and foul water drains, telecommunications, electric cables, gas mains, water mains and ducts within the Site. For the avoidance of doubt, this obligations includes for making safe all redundant works left in-situ, and sealing of voids, where left, against vermin;
  - d) Protect remaining live services against damage or disruption; and
  - e) Minimise vibration and noise produced by the demolition works, and agree appropriate limits for such with the Board to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.
- 4.4.4 Project Co shall allow the Board to carry out independent monitoring that shall include but not be limited to air pollution, noise, and vibration.

## 4.5 Construction Phase Requirements

#### 4.5.1 General

The permanent and temporary Works and all construction operations for the Project should, save where expressly provided otherwise, generally be designed and constructed so that they can be carried out and where appropriate replaced, repaired, renewed and maintained on and from within the Site.

The Site is part of the Campus Site and Project Co has to be aware of and plan and programme the Works and Operations having regard to the other activities and operations ongoing at the Retained Site and Retained Estate.

At some points it may be necessary temporarily for Project Co to enter or have access across other parts of the Retained Site and/or Retained Estate for construction activities in accordance with and subject to the requirements detailed in this Sub-Section 3 and Appendix A Appendix B (Interface Output Specification) and Appendix E (Initial Drainage Proposal) and the Interface Proposals and in accordance with Clause 9 (Nature of Land Interests) of the Project Agreement. Project Co shall be responsible for identifying and implementing all necessary working practices to satisfy statutory requirements in relation to their construction activities. The construction of the Facilities shall be registered with the Considerate Constructors Scheme. The Contractor shall be registered with the Considerate Constructors Scheme.

Project Co shall undertake the role of Client and appoint a Principal Contractor and CDM Coordinator under the Construction (Design & Management) Regulations 2007 and appropriate amendments for the duration of the Works.

Project Co shall also comply with the obligations of the "Contractor" as laid down in the Board's "NHS Lothian Estates Operation Policy For Control of Contractors".

Project Co shall at all times work within the hours permitted by The City of Edinburgh Council in granting planning permission for the Facilities.

Precautions shall be taken to avoid infestation of the Works by rats, mice and other vermin. When drains are being laid, precautions shall be taken to avoid the entry of rodents, including providing temporary stoppers to pipe ends and setting manhole covers in position as the work proceeds. Pipes and cables passing through the foundation walls shall be properly built in.

Project Co shall take all necessary precautions to prevent the outbreak and spread of fire. Project Co shall provide and maintain suitable and adequate fire fighting equipment at points within and adjacent to the Works. Project Co shall comply with the requirements of the Fire Prevention on Construction Sites: The Joint Code of Practice on the Protection from Fire of Construction Sites and Buildings Undergoing Renovation. Bonfires on the Sites will not be permitted.

Project Co. shall not use the Site during the Works for any purpose other than carrying out the Works.

There are helicopter operations to and from the existing helipad facility currently operating from RIE Site. Project Co shall comply with CAA requirements on construction sites close to a helipad. In particular Project Co's tower cranes will require to have aviation lights to indicate the cranes location to the helicopters using the existing helipad.

Project Co shall provide, for the duration of the construction phase, Personal Protective Equipment for visiting Board staff (and other approved visitors), and use of Project Co facilities for meetings etc.

Project Co shall provide the Board with temporary site accommodation for Board staff and advisors for the duration of the Construction Phase.

Project Co shall provide, remove and pay for all associated consumption of the temporary utilities required to construct the Works.

# 4.5.1A Clean Roads and Footpaths

Project Co shall adequately maintain approaches to the Site and/or any other roads and/or footpaths within the Campus Site which it is using or accessing and keep such free from mud and debris or materials to the Board's satisfaction. All vehicles must be cleaned, with any mud or loose debris removed, prior to the vehicles leaving the Site. Project Co shall provide facilities for washing down vehicles before leaving the Site and/or the Campus Site, to avoid contamination of the surrounding roads. Any contamination of surrounding roads, pavements, cycle paths etc. by site traffic shall be removed.

#### 4.5.2 Site Access

**Construction Access over the Yellow Area** 

If Project Co requires to carry out works to form a construction access to the Site over the Yellow Area Project Co shall provide a method statement for these works which method statement will form part of the relevant Interface Proposal and shall construct the works and comply with the requirements of Paragraph 1 of Section 1 (Construction Access) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Construction Access Proposal.

## **Works and Access during the Operational Term**

Project Co shall maintain, repair, replace and renew the Facilities. Where in connection with the carrying out of works of maintenance, repair, replacement and renewal to the Facilities Project Co needs to access the RIE Site and/or RIE Facilities any such works and access shall be carried out in accordance with Section 2 (Operational Construction Issues) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A, and the Interface Proposals and where applicable Paragraph 1 (Access Strategy) of Section 2 (Access Areas, Amended Drainage Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A. This is without prejudice to any other more onerous requirements detailed in the Board's Construction Requirements which may apply to other works being carried out in the RIE Site including without limitation:-

#### Where:-

- a) the works are to repair, maintain, replace and renew service media serving the Facilities located within the Service Strip or the Foul Service Strip Project Co shall also comply with the provisions of Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Service Proposal and where applicable any Amended Service Proposal agreed or determined pursuant to Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A; and/or
- b) the works are to repair, maintain, replace and renew interface links between the fire alarm systems, PTS and ICT and the Joint, Project Co shall also comply with the provisions of Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A, the Interface Output Specification and the Connection Proposal; and
- c) the works are to repair, maintain and (where necessary) replace and renew the Substation HV Cable Infrastructure on the Substation Cable Route Project Co shall comply with the provisions of paragraph 4 of Section 2 (Operational Construction Issues) and paragraph 4 of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Substation Proposal; and/or
- d) otherwise comply with any other requirements in relation to Access Areas otherwise referred to in this Section 3 (Board's Construction Requirements).

#### 4.5.3 Board Major Incident Support

Project Co shall support the Board in dealing with a Major Incident. Project Co's support will be as required by but not limited to the Board's Major Incident Strategy Response Plan Strategic Plan Number reference HPT E023 03.

## 4.5.4 Restrictions and Requirements for Storage of Waste on Site

Project Co is required to demonstrate a waste management programme for the Works to minimise all site waste disposal to landfill, and to maximise reuse/recycling of timber, metal, plastic, paper and other waste arising. Project Co will liaise with all suppliers to ensure the minimum of packaging is used for deliveries of goods and materials to site. Any unavoidable packaging waste is to be recycled through an authorised waste recycler. When surplus excavated material and building spoil and rubbish cannot be recycled Project Co is to dispose of it to a licensed tip and be transported by an approved waste transportation company, and shall fully comply with all Law governing the controlled disposal of waste material. No materials shall be disposed of on Site by any other means. All spoil and waste materials that arise from the construction of the Works shall only be stored on Site until disposed off site. Project Co shall take cognisance of the location of the air intakes for the Retained Estate when assessing the locations for spoil and waste material stockpiles and comply with the requirements of paragraph 4.5.12 in selecting the location for spoil and waste material stockpiles. No burning of any materials is permitted on or near the Site.

Project Co shall meet all statutory waste management regulations and local byelaws in relation to the storage of waste on site including but not limited to the Environmental Protection Act, Environmental Protection (Duty of Care) Regulations 1991, Hazardous Waste Regulations 2005 and WEE Directive.

The storage of waste during construction works shall cause no harm to neighbours and/or other building users at the Retained Site and particular attention is required to the location of waste storage areas in relation to windows and ventilation air intakes in the surrounding buildings.

Waste storage areas must be secure and shall be constructed such that they limit the possibility of leakages and contamination.

## 4.5.5 Site boundary treatment requirements

Project Co shall provide a site boundary that is secure and prevents unauthorised access to the Site at all times.

Around the perimeter of the Site Project Co shall provide a solid painted hoarding which extends from ground level to a minimum of 2.4m and shall provide visual screening of the Site. Corporate signage shall be restricted to the entrances and exits of the Site and in every case there shall be an NHS Lothian sign located next to each of the contractor's corporate signs. There shall be no other advertising on the hoarding or on tower cranes / construction equipment. Artwork created by or on behalf of the Board may be displayed on such crane and/or construction equipment as appropriate as proposed by the Board to Project Co. and approved by Project Co such approval not to be unreasonably delayed or withheld. All NHS Lothian signage shall comply with the recommendations of "Effective Wayfinding and Signing Systems - Guidance for Healthcare Facilities" 2<sup>nd</sup> Edition 2005, NHS Scotland Signage Guidelines and NHSScotland Identity Guidelines.

Project Co shall provide two waterproof public information project boards for external display. Project Co shall discuss and propose to the Board the content, size and location of these signs for approval by the Board such approval not to be unreasonably delayed or withheld.

#### 4.5.6 Site signage restrictions and requirements

Project Co shall obtain approval of the content and layout of the main site signboard/s from the Board such approval of the Board not to be unreasonably delayed or withheld subject to complying with the aftermentioned requirements. That part of the signage which refers to the Board shall follow the recommendations of "Effective Wayfinding and Signing Systems - Guidance for Healthcare Facilities" 2<sup>nd</sup> Edition 2005, NHS Scotland Signage Guidelines and NHS Scotland Identity Guidelines. The signboard/s shall contain the project title, the names of the Board, Project Co and the Principal Contractor. No additional advertising will be permitted on these signs beyond the standard consultant signboards.

# 4.5.7 Signage outside the Site

Project Co shall provide signage, but not in the Yellow Area, to the Emergency Department of the Royal Infirmary of Edinburgh that requires to be clearly visible from Old Dalkeith Road. Project Co shall ensure that existing RIE Facilities signage is replicated or reinforced if temporarily obscured by the construction of the Facilities. Project Co shall replicate or reinforce existing RIE Facilities signage that is obscured by the Works.

#### 4.5.8 Site Accommodation and Compound

Project Co will be entitled to use Car Park E for a site compound during the Construction Phase for the Works, subject to complying with the provisions of Section 3 (Site Compound/Car Park E) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A.

Project Co shall provide a site compound that is secure and prevents unauthorised access at all times. The existing services that run under, on and over Car Park E are to be located by Project Co. A record drawing of the existing services shall be provided to the Board prior to the commencement of construction of the Works. Project Co shall provide and obtain all necessary consents for temporary services to the site accommodation and compound and pay for their use.

Project Co shall be permitted to erect a sign stating their name and the project title at the entrance to the compound. No additional advertising will be permitted.

# 4.5.9 Restrictions and requirements on vehicles accessing the Campus Site road network

Project Co shall comply with paragraph 4.5.2. Notwithstanding the foregoing and any other requirements applying to any works, where any works and/or activities are or require to be carried out in any part or parts of the Access Areas, Project Co shall comply with paragraph 1 of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Access Strategy and where applicable any Access Strategy agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A and also in accordance with Clause 9 (Nature of Land Interests of the Project Agreement.

Project Co shall ensure that all contractors attending the Site are made aware of the heightened level of care and consideration required when carrying out work in an operational hospital in order to mitigate any detrimental effect on patient care, Board staff and the general public.

Project Co shall propose, discuss and agree with the Board a strategy for providing unimpeded Blue Light access to the RIE Emergency Department and other appropriate departments / units

during construction of the Works. Project Co shall ensure that at all times during the construction and commissioning of the Works that free and unimpeded access is maintained for Blue Light emergency traffic through the Orange Area to the adult Emergency Department of RIE and through the Orange Area to the Percutaneous Cardiac Investigation Unit (PCIU) within the RIE. This includes the ambulance access which will encroach upon the Site, the stretcher drop off entrance and the ambulant entrance at the adult Emergency Department of the RIE. Provisions will also have are also to be made on the Site and Campus Site as required, to provide a minimum of five ambulance drop off parking spaces. The spaces are to be such that a stretchered patient can be taken directly into the adult Emergency Department of the RIE from an ambulance parked at any of these five spaces. Ambulances must also be able to pull out from any of the five spaces without hindrance to any other parked ambulance. Project Co shall plan construction and commissioning of the Works so as to accommodate these requirements including without limitation the TMS and/or Access Strategy and/or the requirements of Section 2 (Access Areas and Amended Drainage Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A.

Project Co shall agree with the Board revisions to the Blue Light traffic access/egress routes during the construction period.

Where construction traffic is required to access the Orange Area and any other part of the Campus Site road network, Project Co shall be responsible for ensuring that drivers observe the 15mph speed limit, that all vehicles have a valid MOT (if required), have the appropriate comprehensive insurance and that all drivers hold a valid UK driving licence.

A vehicle "Civil Penalty Notice Scheme" operates on the Campus Site.

#### 4.5.10 Construction works further information

#### a) Construction works on the Site but connecting to other parts of the RIE Facilities

- (i) Fire connection and the Joint
- (A) As set out in paragraph 4.5.1 the new Facilities shall be delivered as a standalone new build. However, the Facilities will be physically linked to the RIE Facilities at ground and first floor levels. The part of the RIE Facilities to which the Facilities will be linked is called the Link Building.
- (B) The Link Building is part of the RIE Facilities. Project Co will be responsible for designing and constructing the Facilities to physically link to the RIE Facilities at the Link Building interface point as more particularly detailed in the Interface Output Specification. Project Co shall carry out the works to connect the Facilities to the Link Building subject to and in accordance with:
  - 1. Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A;
  - 2. Interface Output Specification; and
  - 3. the Connection Proposal.
- (C) Project Co shall design and construct the Fire Alarm System in accordance with the provisions detailed in paragraph 8.10.
- (D) Project Co shall construct the Joint. The Joint shall form part of the Facilities.

# b) Construction works outside the Site - Off Site Works

#### (i) Works outside the Site but within the Campus Site, and maintained by Project Co

- (A) There shall be building services links between the Facilities and the RIE Facilities in respect of building services and other connections in terms of:
  - 1. infrastructure associated with ICT;
  - 2. a pneumatic tube system (PTS);
  - 3. Foul Water Drainage connections.

The above matters set out in paragraph 4.5.10 (a) and 4.5.10 (b) (i) (A) form part of the RIE Works

# (ii) Access road for the Substation Works in the Substation Access Area

- (A) Project Co will design and build a new PTS system which will run from the Facilities to the pharmacy and laboratories within the RIE Facilities. Project Co will design and build an ICT Data Network system which will run from the Facilities to link to the Board's ICT equipment/systems within the RIE Facilities. The Board will advise Project Co of the route for the PTS and ICT within the RIE Facilities. Project Co will be responsible for replacing, repairing, renewing and maintaining the PTS and ICT. Project Co shall provide design, construction and other information which information will form part of Project Co's applicable Interface Proposal for approval by the Board and shall design build, construct, replace, renew and maintain in accordance with:
  - 1. Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A
  - 2. The Interface Output Specification; and
  - 3. The Connection Proposal.

#### (B) Service Strip

#### 1) FOUL WATER DRAINAGE

There may also be connections into some existing infrastructure for Foul Water Drainage. If Project Co requires to connect the Foul Water Drainage systems for the Facilities into the existing Foul Water Drainage systems for the RIE Site and/or RIE Facilities then foul water drainage systems must be designed and constructed by Project Co such that they may be connected to foul water drainage systems only at the agreed connection points in the Initial Drainage Proposal and/or within the Foul Service Strip (the Foul Water Drainage). Project Co will be responsible for replacing, repairing, renewing and maintaining the Foul Water Drainage systems serving the Facilities and the connections. Project Co shall provide design, construction and other information which shall be part of Project Co's applicable Interface Proposals to the Board for approval, about the Foul Water Drainage systems serving the Facilities. Project Co shall comply with the requirements for installing, maintaining, repairing, renewing and replacing foul water drainage systems subject to and in accordance with:

- (i) Section 2 (Operational Construction Issues) and Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A; and
- (ii) The Access Strategy; and

- (iii) The Service Proposal; and
- (iv) The Supplemental Drainage Proposal; and where applicable
- (v) any Access Strategy and/or Amended Drainage Proposal and/or Amended Service Proposal as applicable agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) and Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A.

#### 2) ELECTRICAL, GAS AND WATER CONNECTIONS

As regards design and construction, maintenance, repair, replacement, and renewal of any electrical, gas and water connections these must all be independent services serving the Facilities and shall not connect into any such services serving the Retained Site and/or Retained Estate. However wherever any such services have to be installed and cannot be installed on the Site they may be installed on the RIE Site, the locations for such services are however restricted to certain areas of the RIE Site namely the Service Strip. Project Co will be responsible for design and construction and replacing, repairing, renewing and maintaining such services serving the Facilities. Project Co shall provide such design, construction and other information which shall be part of Project Co's applicable Interface Proposals for approval by the Board about the services and shall comply with:

- 1. Section 2 (Operational Construction Issues) and Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A; and
- 2. The Access Strategy; and
- 3. The Service Proposal; and (where applicable)
- 4. any Access Strategy and/or Amended Service Proposal agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) and Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of this Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters) (as varied, amended or supplemented from time to time in accordance with the Project Agreement).

# (C) SUBSTATION ACCESS WORKS

If Project Co chooses to construct a substation on the land outlined in blue on Plan 4 in accordance with paragraph 4.5.10 (d) below then Project Co shall design and construct and thereafter maintain, repair, replace and renew the access road an access road thereto in the Substation Access Area and shall comply with the requirements for the access road detailed in paragraph 4.5.10 (d) below.

c) Construction works outside the Site but within the Campus Site but not maintained by Project Co – the Retained Estate Handback Infrastructure which comprise Hospital Square Works, Cycle Path Works and Surface Drainage Works

The Board has identified the following works which will be required to be carried out outwith the Site on the RIE Site. These works comprise Hospital Square Works, Cycle Path Works and the Surface Water Drainage Works. These works will be carried out by Project Co and

upon completion will not be maintained by Project Co but once completed will form part of the Retained Estate Handback Infrastructure. These works include:

# (i) Hospital Square Works

- (A)The design and construction of new roadway, hard and soft landscaping works to the area between the Chancellor's Building, RIE Facilities and the redline boundary to the north and east of the Site:
- (B) Emergency Departments: The design and construction of new roadways, hardstandings and parking areas at the new entrance to the RIE Facilities and the Facilities' emergency departments including without limitation:
  - 1. Roundabout at the termination of the road north of the link to the RIE\_Facilities;
  - 2. RIE Facilities Day Surgery/PCIU ambulance drop off that will have access to the roundabout referred to in item (i) above;
  - 3. Taxi rank and drop off set back from the road outside Ann Rowling Clinic;
  - 4. Drop off set back from the road opposite the taxi rank and drop off referred to in item 3. above;
  - 5. Roundabout at the RIE Facilities entrance for access to the DCN proximity parking and RIE\_Facilities Day Surgery/PCIU ambulance drop-off;
  - 6. The ambulance drop-off for the Facilities ED from Old Dalkeith Road. This shall have a minimum of 5 ambulance drop off spaces for the Adult and Paediatric Ambulance ED. The layout shall prevent Project Co's Operational Term vehicles from stopping ambulances from having access to the ED ambulance drop off spaces for the ED within the Facilities and RIE Facilities emergency department. For the avoidance of doubt there may also be element of these works carried out on the Site in which case any such elements are part of the Facilities and not Retained Estate Handback Infrastructure.
  - 7. Emergency visitor parking for the Facilities ED from Old Dalkeith Road. For the avoidance of doubt there may also be element of these works carried out on the Site in which case any such elements are part of the Facilities and not Retained Estate Handback Infrastructure.
  - 8. Link to the existing Adult Ambulant Entrance to the RIE Facilities emergency department and its 6 ambulance drop off spaces.
  - (C) Project Co shall create an access to the loading bay areas of the Facilities, the VIE Compound and energy centre at the Site from Old Dalkeith Road.

# (ii) Surface Water Drainage Works

There may also be connections into some existing surface water drainage. If Project Co requires to connect the surface water drainage systems for the Facilities into the existing surface water drainage systems on the RIE Site then surface water drainage systems must be designed and constructed by Project Co such that they may be connected to surface water drainage systems at the agreed connection points in the Initial Drainage Proposal (the Surface Water Drainage Works). Project Co shall provide design, construction and other information which shall be part of Project Co's applicable Interface

Proposals to and for approval by the Board about the Surface Water Drainage Works systems serving the Facilities and Project Co shall comply with Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues\_and Interface Proposals) of Appendix A, the Initial Drainage Proposal, the Supplemental Drainage Proposal, the Access Strategy and where applicable any Access Strategy and/or Amended Drainage Proposal agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A.

# (iii) Cycle Path Works

For details of the cycle works see paragraph 3.8.4 of this Sub-Section C of the Board's Construction Requirements.

## (d) Construction works outside the Campus Site and maintained by Project Co

# (i) SUBSTATION WORKS

Project Co shall be responsible for getting a dedicated HV power source for the Project via a dedicated Scottish Power substation. The Board has identified the Substation Site as the possible location for a dedicated substation for the Project.

If Project Co chooses to locate the substation on the Substation Site then Project Co shall provide design, construction and other information which shall be part of Project Co's applicable Interface Proposals to and for approval by the Board about the substation and access thereto which access may be formed only on the Substation Site and Project Co shall comply with the provisions regarding the Substation Access and Substation HV Cable Infrastructure in paragraphs 3 to 5 of Section 5 (Access Areas, Drainage and Substation) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Substation Proposal (the Substation Works).

# (ii) SUBSTATION HV CABLE WORKS

If a substation is constructed on the Substation Site then in order to get power from the substation to the Site the Board has identified a route for the Substation HV Cable Infrastructure, the Substation Cable Route, on the Bioquarter Site. The cable route to the Facilities may enter the Site via the Service Strip (shown shaded yellow and hatched in black on Plan 2 and the cable route may not cross the Retained Site at any other point. In constructing the Substation HV Cable Infrastructure on the Substation Cable Route, Project Co shall be responsible for all design, construction, maintenance, repair, replacement and renewal and shall comply with paragraphs 2 and 4 of Section 2 (Operational Construction Issues) and paragraphs 1 and 3 to 5 of Section 5 (Access Areas, Drainage and Substation) and Section 6 (Service Strip and Foul Service Strip) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and the Access Strategy and Substation Proposal and the Service Proposal and where applicable any Access Strategy and/or Amended Service Proposal agreed or determined pursuant to Section 2 (Access Areas and Amended Drainage Proposal) and/or Section 3 (Amended Service Proposal) of Part 2 (Interface Proposals Procedure) of Appendix A (the Substation HV Cable Works).

# 4.5.11 Workmanship, Construction Accuracy & Tolerances

Project Co shall ensure that general workmanship conforms to current revisions of BS 8000: Series "Workmanship on Building Sites", which covers typical building construction activities. Where specialist design proposals require construction activities outside the scope of this

document, Project Co shall propose specific quality procedures relating to these activities based on Good Industry Practice current at the time, as a minimum.

Project Co shall ensure that workmanship for all construction and component assemblies is as defined in the British Standards and current industry best practice t. Work is to be true to detail with sharp profiles, straight and free from defects, marks, waves or flaws of any nature impairing strength, performance or appearance.

The buildings and the external works shall be designed and set out by Project Co in accordance with BS 5606:1990 "Guide to Accuracy in Building".

In some situations the tolerances identified in BS 5606 may not be appropriate for the particular elements or combination of elements in the Facilities. Where special levels of accuracy are required in relation to Project Co's proposals these shall be stated by Project Co. Project Co shall consider the recommended procedure set out in Figure 8, Section 3, Appendix B, of BS 5606.

Project Co shall identify critical dimensions and setting out points on all its drawn information.

#### 4.5.12 Control of Noise, Vibration and Dust

Project Co will ensure that unacceptable dust and pollution as a result of construction works or any other activities undertaken on the Site is not created at locations where patients, staff, visitors of members of the public might be exposed to pollutants and areas adjacent to ventilation intakes on the Campus Site (in particular intake vents at the existing operating theatres at the RIE Facilities and at the University Facilities). The ambient air quality standards to be met are as outlined in the table below:

# Ambient air quality standards

Pollutant	Averaging Period	Air Quality Objective	
		Concentration (µg/m³)	Allowance
Nitrogen Dioxide (NO <sub>2</sub> )	1-hour	200	18 per calendar year
	Annual	40	-
Particulates (PM <sub>10</sub> )	24-hour	50	35 per calendar year
	Annual	40	-
	Annual	18	1
Particulates (PM <sub>2.5</sub> )	Annual	12	1
		25	-
		15% reduction	-

Project Co shall comply as a minimum with the mitigations detailed in the Planning in Principle – Environmental Statement dated July 2011 and Addendums dated August 2011 and October 2011. Project Co shall comply with BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites Part 1: Noise and BS 5228-2:2009 Code of practice for noise and vibration control on construction and open sites Part 21: Vibration. Project Co shall comply with Control of Noise (Code of Practice for Construction and Open Sites) (Scotland) Order 2002. Project Co shall comply with the noise controls set in HAI-SCRIBE 2 review.

Project Co shall ensure that the design and installation of any plant, machinery or equipment shall be such that any associated noise complies with NR25 when measured within any nearby living apartment, and no structure borne vibration is perceptible within any nearby living apartment.

The attention of Project Co is drawn to the provisions of Sections 60 and 61 of the Control of Pollution Act 1974, with reference to the control of noise in relation to any demolition or construction works. Where such works are adjacent to occupied property, Project Co shall ascertain from the Site neighbours what requirements or restrictions, if any, shall apply, particularly in relation to Aspergillus. The restrictions may relate to the type of construction plant to be used, siting of construction plant, methods of working to be adopted, the hours of work permissible and may, in addition, impose a maximum noise level that must not be exceeded.

With regard to piling operations, the Board considers it essential that steps are taken by Project Co to limit the effects of noise and vibration. Project Co is required therefore to demonstrate through the selection of the method of piling that full consideration has been given to this requirement.

Project Co shall at all times ensure that the appropriate silencers and/or noise suppression apparatus are correctly fitted to construction plant and equipment.

Project Co shall fit all compressors, percussion tools and vehicles with effective silencers of a type recommended by the manufactures of the compressors, tools or vehicles but in any event to the requirements of BS 5228-1:2009.

Any equipment of a semi-permanent nature used by Project Co, which produces noise on a regular basis, shall be positioned to cause the minimum disturbance to adjacent areas. Project Co shall ensure absolute care is taken at all times throughout the course of the Works to prevent the egress of water, dust, debris or any microbiological contamination out of the Site and into adjacent buildings. In particular, Project Co shall establish any specific requirements for the control of dust.

Project Co shall ensure that all of the contractor and subcontractor's workforce are trained on the pollution and noise reduction measures in operation during the Works.

# 4.5.13 Meetings with Consort during the Construction of the Works

Project Co shall attend meetings with the Board and Consort during the construction of the Works. The Board shall manage the meetings including chairing and preparing the minutes except for the fortnightly Health and Safety Group meetings that Consort chair and minute. Project Co shall have the same lead person or a named deputy, at all meetings. The meetings that Project Co shall attend are to be agreed with the Board.

#### 4.5.14 Meetings with Immediate Neighbours

Project Co shall attend meetings with the Board and all immediate neighbours during the construction of the Works. Project Co shall manage the meetings including chairing and preparing the minutes Project Co shall have the same lead person, or a named deputy, at all meetings. The meetings that Project Co shall attend are to be agreed with the Board.

# 4.5.15 Meetings with the Board during the Construction of the Works

Project Co and the Board shall agree the day-to-day; week-to-week meetings to be attended by Project Co and the Board. The purpose, timing, structure, management and content of the meetings are to be agreed by the Board and Project Co. Project Co shall have the same lead person at all meetings as far as possible or a named deputy.

### 4.5.16 Restrictions on Images and Videos during Construction of the Works

Project Co are required to obtain the Board's agreement prior to the use of CCTV cameras, webcams and the like to take images, videos and the like of the Works whether on or outside the Site.

#### 4.5.17 Completion Requirements

On completion of the Works, Project Co shall provide the Facilities as clean to comply with the Schedule Part 10 (Outline Commissioning Programme). Project Co shall demonstrate how the proposals facilitate the control and management of an outbreak and spread of infectious diseases in accordance with SHTM 03-01 and SHFN 30.

Project Co shall adopt a systematic and thorough approach to the commissioning of the Facilities including the setting to work, testing and providing the handover documentation for the same.

Project Co shall approach the commissioning activities as an entirely separate procedure undertaken by Project Co and ensure all activities interface with the buildings themselves, building services and equipment provisions.

Project Co shall ensure that the ability to commission the systems and installations is considered at an early stage and is designed into the Facilities and is an inherent part of the overall buildings solution.

During the design stage Project Co shall detail outline commissioning periods required on-site such that these are built into the Programme and Outline Commissioning Programme.

During the Construction Phase Project Co shall ensure that installations comply with the design intent of the drawings and that all installation and commissioning activities at the Facilities are performed correctly. This shall include ensuring physical access is easily achievable to all commissioning stations and devices.

By the date for Project Co to make available the principal operation and maintenance manual set in Clause 18.5 of the Project Agreement, Project Co shall provide to the Board a complete set of electronic records representing the design, construction, testing and commissioning and completion of the "as-constructed" Facilities that include the routes of all building services. This shall include, but not be limited to, a full set of as-built records, drawings, specifications and the like and the documents in the Completion Criteria, incorporating all changes to the design and all remedial works during construction. The documents and drawings format(s) and [ ] number of copies are to be provided by Project Co. For the purposes of Clause 17.18 and 18 of the Project Agreement all final as-built records for the Facilities shall include, as a minimum:

a) Design information including all relevant design calculations, parameters, assumptions, standards, specifications, product data sheets for all components and parts, including

details of the influence on the design of actual construction methods, including any change or remedial works during construction.

- b) As built drawings for all component parts of the Facilities;
- c) Testing & Commissioning records for all discrete components, subsystems, systems and the Facilities as a whole;
- d) Operating and Maintenance manuals;
- e) Health and Safety File;
- f) Full set of design, construction, testing and commissioning and completion records/certification.
- g) All other information that is required to be collated under the Construction (Design and Management) Regulations 2007 as amended from time to time.

Project Co shall provide to the Board, at the Actual Completion Date, a certificate confirming that the Facilities comply with the requirements of NHS Scotland Firecode.

Construction records and all information relevant to the construction of the Facilities shall be stored in a secure electronic data room created specifically for this purpose by Project Co for access after completion. The system for storage of data and information shall be designed by Project Co and shall generally be compatible with the Board's existing systems. The format of the data room and the system for storage of data shall be designed by Project Co and submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. Project Co shall be responsible for management and administration of the data room for the Project Term.

# 4.5.18 Oversailing Activities

When Project Co intends to oversail any part of the Retained Site and/or Retained Estate in connection with the Works and/or any works in the Operational Term then Project Co shall comply with the Oversail Strategy and Section 4 (Oversail) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A and/or where applicable any Additional Oversail Strategy agreed or determined pursuant to Section 1 (Oversail) of Part 2 (Interface Proposals Procedure) of Appendix A.

# **5 General Construction Requirements**

#### 5.1 Schedule of Life Expectancies

The buildings, including building services components, shall be designed with materials, components and techniques that are readily available, reliable, sustainable and easily maintainable in use. The Board supports buildings constructed using components with proven technology, with high life expectancy, leading to minimum cost in use.

Good Industry Practice for a design life at the Actual Completion Date for the elements listed below shall as a minimum be:

a) Structure, including substructure

70 years

b) Floor Structure

70 years

c) Roof S	Structure	70 years
d) Draina	age and below ground civil engineering infrastructure	70 years
e) Extern	nal Walls	70 years
f) Extern	nal Openings, windows and door	25 years
g) Roof F	Finishes	25 years
h) Extern	nal finishes	25 years*
i) Extern	nal Hard Surfaces	20 years
j) Interna	al partitions including openings	25 years
k) Interna	al Doors	25 years
l) Interna	al finishes (excluding soft flooring)	15 years*
m) Soft flo	poring	12 years
n) Interna	al fixtures and fittings	15 years
o) Engine	eering plant	CIBSE Guidance
p) Engine	eering services distribution systems	CIBSE Guidance

<sup>\*</sup>excluding painted finishes

Project Co shall demonstrate that the design life proposed for any element will be achieved.

Materials and components forming part of the Facilities, which require maintenance and replacement within the life of the Facilities, shall be selected, located and fixed in such a way as to minimise future inconvenience, disruptions and to avoid temporary closure of the Facilities.

#### **5.2 Infection Prevention & Control**

The Board requires the highest priority on infection prevention and control to be given in relation to the movement of goods and in particular the segregation as far as is reasonably practical of clean linen, food trolleys and the removal of waste, soiled linen and empty food trolleys.

Project Co shall ensure all aspects of the Facilities allow for the control and management of any outbreak and/or spread of infectious diseases in accordance with the following:

- a) Infection Control in the Built Environment: Design and Planning (SHFN 30);
- b) Scottish Infection Manual "Managing the Risk of HAI in NHS Scotland";
- c) Health Facilities Scotland Healthcare Associated Infection System for Controlling Risk in the Built Environment (2007)
- d) Guidance provided by Clinical Standards Board NHS HIS;

- e) Textiles and Furniture (SHTM 87);
- f) Ventilation in Healthcare Premises (SHTM 03-01);
- g) "Guidance on Prevention and Control of Clostridium difficile Infection (CDI) in healthcare settings in Scotland" Health Protection Scotland, 2009; and
- h) NHS Lothian Infection control web based manual <a href="http://www.nhslothian.scot.nhs.uk/Services/A-Z/InfectionControl/Pages/default.aspx">http://www.nhslothian.scot.nhs.uk/Services/A-Z/InfectionControl/Pages/default.aspx</a>;

# **5.3 Thermal Requirements**

Project Co shall ensure the buildings' envelopes complies with Section 6 of 2011 Non-domestic Technical Handbook to The Building (Scotland) Amendment Regulations 2010 and the following criteria:

- a) The entire building envelope shall be thermally broken and no details that allow cold bridging shall be used;
- b) The whole building envelope shall be provided with a continuous air and vapour tight skin layer with a vapour resistance of not less than 200 Mns/g when tested in accordance with BS 3177. This barrier shall be on the accommodation side of any insulation and may be formed of differing materials at different parts of the construction provided that continuity is maintained in all places. The vapour barrier material shall be non-combustible;
- c) The building fabric shall include passive design measures to limit summer temperatures to figures given within the Environmental Matrix; and
- d) The work to the fabric to achieve the above standards shall include but not be limited to enhanced window performance, high solar performance glazing systems, brise soleil and enhanced thermal insulation value.

# **5.4 Acoustics**

Project Co shall define the acoustic criteria to be adopted on a room-by-room, and corridor-by-corridor basis with reference to SHTM 08-01: Acoustics. Project Co shall be responsible for demonstrating compliance with the agreed criteria.

Project Co shall endeavour within their design, to minimize the transfer of noise, dust and vibration throughout the Facilities. In particular, the design shall take account of the potential for disruption to the clinical function of the Facilities caused by noise, dust, vibration or other nuisance, however caused, as a result of future modifications / remedial works that may be required to the Facilities.

Project Co shall demonstrate in their design, how it shall address the issue of undesirable noise transmission in patient waiting areas. Project Co shall endeavour to minimise and mask ambient noise sufficiently to preserve patient privacy, confidentiality and maintain a calming atmosphere.

Project Co shall ensure that the acoustic design of the Facilities shall give due consideration to the requirements of the deaf and hard of hearing. In particular the level of background noise shall be such that it does not cause particular difficulty for those with such conditions.

In addition, Project Co shall ensure all specialist audiology sound-proofing in accordance with the Board's Construction Requirements this Schedule Part 6 Section 3 Sub-Section D (Specific

Clinical Requirements), Sub-Section E (Specific Non Clinical Requirements) and this Schedule Part 6 Section 6 (Room Data Sheets) are designed into the Facilities.

# 5.5 Room Mock-ups

Project Co shall provide the design of the room mock-ups including the 1:50 floor plan with loaded floor, walls and ceiling including details showing Equipment. The design for the mock-ups shall include the detailing for the floor finishes including skirting interface. Project Co will provide accommodation for, and full scale mock-ups of the following rooms, as a minimum, for use in the design development and approval process:

- a) Touch Down Base;
- b) Adult Single Bedroom with ensuite;
- c) Paediatric Single Bedroom with ensuite
- d) Paediatric Four Bedded room;
- e) Clean Utility Out Patient Department and
- f) Clean Utility In-patients

These shall be built with all services, equipment, doors and windows. They shall include the floor, wall and ceiling finishes. The services and equipment do not need to be live. Group 3 equipment will be provided by the Board for Project Co to install into the rooms.

The design and construction of the room mock-up shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. They shall be provided in a timely manner, to ensure they add value to the design development and approval process.

#### 5.6 Integration with Engineering Services

Internal walls, partition systems, ceiling voids and service risers shall be capable of integrating services, e.g. wiring, plumbing, medical gases and service terminals as required without detriment to the performance of any building services and other Facilities performance criteria such as fire resistance or acoustic properties. Engineering Services shall be co-ordinated such that satisfactory means of maintenance access is provided which minimises the potential for disruption to the Board's operations.

# 5.7 Building Envelope

The building envelope includes all external wall, façade and roof cladding elements associated with the Project. Project Co shall design the building envelope to provide a high quality enclosure to the accommodation and shall provide resistance to impact damage and intruder break-in, either by cutting or disassembly of the wall components. It shall incorporate an external finish which is essentially self-cleaning irrespective of the frequency of maintenance. Whilst selection of all materials and construction techniques is the responsibility of Project Co, there are a number of key criteria which must be satisfied by Project Co, as follows:

- a) All selected materials shall be compatible with each other;
- b) All selected materials shall be subject to the approval of The City of Edinburgh Council as part of the overall planning approval process;

- c) The selected materials shall have a verifiable life expectancy in line with the criteria set out in paragraph 5.1 and certain specific elements, such as sealants, which may have a design life of less than the period stated, shall be identified and submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement and shall be the subject of a planned maintenance programme for replacement;; and
- d) Any cladding systems chosen for use on this Project shall be designed and constructed to resist silently, without detriment to the required performance or appearance, the action of the elements including wind, rain, hail, snow, ice, solar radiation, temperature changes, moisture movement, structural movements, construction tolerances, thermal movements, the internal environment of the buildings and dead or imposed loads. The systems shall include the necessary provisions to enable regular cleaning from outside and regular routine maintenance to take place, without disturbance to the activities within the buildings, in accordance with the current provisions of the amended Workplace (Health, Safety and Welfare) Regulations 1992 and Ability to Open Windows Safely guidance.

Project Co shall ensure that the buildings are constructed and the design is detailed to limit air infiltration to minimum levels to reduce energy consumption and improve internal environmental conditions.

Performance demonstration tests for all roof and wall elements shall be carried out by Project Co in accordance with the following:

Project Co shall ensure all testing of mock-up assemblies of parts of the buildings construction are completed satisfactorily before work starts on the Site in relation to the building envelope.

Project Co shall arrange for the testing of all completed wall and roof assemblies to prove compliance with the requirements of The Building (Scotland) Regulations 2004 and its amendments

Project Co shall ensure that the external hard and soft landscaping around the buildings shall allow access for the appropriate maintenance / cleaning system and equipment utilising the hierarchy of control measures included within the Work at Height Regulations 2005 as amended. Appropriate provisions shall be incorporated by Project Co to allow the safe use of the appropriate maintenance / cleaning system including but not limited to safe access to the workplace and equipment. The structural frame and external skin of the buildings shall be designed by Project Co to accommodate the loading requirements of access equipment and operatives, where the cleaning and maintenance system uses this method.

Project Co shall design the buildings' envelope to prevent rainwater entry into the building structure and the internal accommodation. Where water penetrates cladding elements, as part of the functional design and construction techniques, Project Co shall ensure it is controlled and drained externally.

# 5.8 Internal Areas

Project Co shall ensure that the internal areas of the buildings shall allow access for the appropriate maintenance / cleaning system and equipment utilising the hierarchy of control measures included within the Work at Height Regulations 2005 as amended. Appropriate provisions shall be incorporated by Project Co to allow the safe use of the appropriate maintenance / cleaning system including but not limited to safe access to the workplace and equipment. The internal frame and internal skins of the buildings shall be designed by Project

Co to accommodate the loading requirements of access equipment and operatives, where the cleaning and maintenance system uses this method.

# 5.9 Ceilings Heights & Voids

The floor to ceiling heights, or the floor to the underside of ceiling mounted plant where there are no ceilings, shall be designed to accommodate the nature and use of the accommodation.

Project Co shall provide ceiling heights and voids that provide an interface between the mechanical and electrical services installations and the accommodation below with the integration of service outlets, lighting, grilles and other fittings.

Project Co shall configure the design, wherever possible, to accommodate future flexibility.

The Board accepts that there will be a limited number of areas where future flexibility will be less easily achieved. These areas may include (but not be limited to): operating theatres; shielded rooms; and rooms designed to accommodate heavy imposed loads.

An appropriate and safe void allowance above all ceilings shall be provided, including appropriate and safe points of access for maintenance of services. These shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. The void allowed shall be adequate for the proper co-ordination and installation of engineering, cabling (including IT) and other services.

Co-ordination with the electrical, mechanical and communication services shall be an inherent part of the ceiling and building design. Within each area the installation of the engineering services provision shall be co-ordinated with the ceiling layout and allow simple relocation if required.

Suspended ceilings shall be readily demountable without suffering damage or becoming soiled and shall be easily cleaned. Frequently accessed voids shall be fitted with robust hinged locking doors or hatches.

Project Co shall ensure that the void above the ceiling is fully accessible from below, unless otherwise agreed by the Board, and adequate for the proper installation and co-ordination of the services, and for their future maintenance, repair and replacement. Allowance shall be made by Project Co for the installation of additional services in the future wherever possible. Where the design does not include the need for ceiling voids for services there shall be an allowance made by Project Co for a dedicated zone for the installation of ceilings and services at a later date.

Project Co shall ensure that the ceiling layouts are co-ordinated with the drainage, mechanical and electrical services installations. Project Co shall demonstrate its solution to this requirement prior to the commencement of construction.

Ceiling mounted booms required for patient support and monitoring systems in theatres, Paediatric Intensive Care Unit (PICU), treatment or x-ray rooms shall be co-ordinated with the ceiling layouts.

Project Co shall ensure the design and construction provide flexibility in terms of fixtures and fittings, i.e. locations of individual pieces of equipment can be readily changed and not unduly restricted by the type of construction.

Project Co shall ensure that the ceiling voids are designed to accommodate the specific requirements of the fire strategy for the Facilities – and in particular, the provision of cavity firebarriers within compartments.

# 5.10 Corridor Widths and Heights

Corridor widths and heights shall satisfy the relevant guidance provided by:

- a) BS8300:2009
- b) The Equality Act 2010;
- c) SHFN14 "Disability Access";
- d) HBN 00-04;
- e) SHTM 81; and
- f) Other relevant statutory guidance.

The hospital streets are to have a minimum unobstructed width of 3 metres. Other corridor widths shall be as defined by the nature and use of the accommodation. Corridor heights shall be as defined by the nature and use of the accommodation. Main interdepartmental corridors in areas that patients may travel in beds shall be of sufficient width to allow two beds, with any attached equipment, to pass. The corridors width and height shall allow the installation, removal or replacement of clinical and non clinical equipment. Minimum widths and heights shall apply along the whole length of the corridor.

### 5.11 Door Widths and Heights

Clear widths and heights of all door openings in addition to satisfying the requirements of The Building (Scotland) Regulations 2004 and The Building (Scotland) Amendment Regulation 2011, shall comply with the guidance of BS 8300:2009, SHTM 81, SHTM 58 and the relevant section of HBN 40. Door widths shall be identified in the relevant Room Data Sheet.

The door opening widths and heights in clinical areas shall be sufficient to allow the safe passage of a four section profiling electric bed with associated equipment and escort alongside.

Notwithstanding the above, Project Co shall be responsible for establishing, through detailed consultation with the Board, additional specific requirements for door widths and heights in all areas of the Facilities. Consideration shall be given to providing sufficient door width in areas where the Board's operations rely on the use of larger items of equipment such as waste containers and regeneration trolleys.

Door widths, heights and door configuration shall be provided to allow for the delivery and removal of equipment to each area.

#### 5.12 Windows

Project Co shall ensure that due consideration is given to the location and extent of glazing on external walls with regard to solar gain and heat loss. Solar control glazing, or appropriate solar shading, shall be used on windows on east, west and south facing elevations. The use of blinds

or other device placed between secondary glazing or double sashes shall not be considered appropriate solar shading.

Courtyards, and courtyard elevations, shall be designed by Project Co so that daylight to usable room spaces at the lowest level of the courtyards is adequate for normal tasks within the rooms.

The Board wish to see the use of natural daylight contributing towards the achievement of a high standard of environmental quality.

Natural light shall be provided in public spaces and in occupied private and staff spaces within the Facilities as far as is practical. Natural and artificial light sources shall be designed to avoid or minimise glare.

Window area and sill height, privacy and security requirements will require special consideration for ground floor accommodation to allow sufficient daylight and views out whilst maintaining privacy from people outside the building.

Where transparent window glass requires to be rendered translucent for reasons of privacy either by obscure glazing or by the use of applied reflective films, then consideration shall be given to the effect of internal artificial lighting during the hours of darkness. This particularly, but not exclusively, applies to all patient areas situated at or adjacent to external public spaces.

Project Co shall provide all windows with a security rating classification of 2 or 3 for manual intervention attack when tested in accordance with Loss Prevention Standard LPS 1175: Issue 6: Table 4: May 2007 and shall meet the relevant performance standard in the appropriate British Standard. Glazing and glazing sizes shall be kept to the minimum compatible with the requirements of lighting, surveillance and visibility.

Where possible all windows shall be designed by Project Co to be cleaned both externally and internally from the inside, unless otherwise agreed by the Board. Project Co shall ensure no portions of windows, either fixed or opening shall come below the level of worktops or desks included in the Schedule Part 11 Equipment Schedule.

Project Co shall ensure opening windows are provided with good quality well-fitting seals and shall be capable of opening at the top and bottom of the frame and shall be fitted with restrictors to give a maximum opening of not more that 100mm in normal use. The effect of such restrictors shall be taken into account by Project Co when calculating the effect on efficient and effective natural ventilation requirements for the room. Project Co shall ensure all windows required for ventilation shall be provided with controllable trickle ventilators within the head of the frame or with two stage key lockable handles giving 5 – 10mm ventilation gap. The opening lights of the windows, and any control devices, shall not interfere with the location or operation of blinds or curtains. All windows and fittings shall be compliant with anti-ligature requirements.

External sills shall be designed to prevent birds from roosting.

Project Co shall ensure that locking devices, to enable the windows to be released for cleaning purposes, shall be by key or other device such that the locks cannot be released by unauthorised persons.

Project Co shall ensure that all handles or control gear shall be placed at levels which enables them to be operated by staff standing on the floor without the use of loose poles, and which do not conflict with the location of the adjoining construction elements, including blinds and curtains. Where windows are placed over worktops or desks, or where the operation as

described above is not achievable, mechanical or electrical means of opening shall be provided by Project Co with controls located in a suitable position within the room concerned.

Project Co shall test the windows and other external opening assemblies (louvres and doors) in accordance with the following.

- a) BS EN 1027:2000 Windows and Doors Watertightness Test Method;
- b) BS EN 12210:2000 Windows and Doors Resistance to Wind Load Classification; and
- c) The Test Report Format contained in the withdrawn standard BS 5368, Part 4: 1986 (EN86).

#### 5.13 Finishes

#### 5.13.1 General Finishes

Project Co shall select finishes on the basis of the following:

- a) Accessibility;
- b) Appropriateness;
- c) Durability;
- d) Robustness;
- e) Compatibility;
- f) Maintainability;
- g) Suitability for life cycle replacement;
- h) Co-ordination with other finishes;
- i) Suitability for infection control;
- j) Health and Safety attributes;
- k) Life Expectancy set out in paragraph 5.1;
- I) Easy of future maintenance; and
- m) Appearance.

All wall finishes and backgrounds shall be selected and installed in accordance with the NHS Requirements set in paragraph 2.3, and appropriate British and European Harmonised Standard Specifications and Codes of Practice. The Board's requirements are identified in this Schedule Part 6 Section 6 (Room Data Sheets) and the finishes listed in the table set out in paragraph 1.2.3 of Schedule Part 8 (*Review Procedure*).

Areas of the Facilities that are subject to potential damage from trolleys, vehicles, beds or other similar traffic shall have adequate protection to comply with SHTM 69 as a minimum.

The finishes detailed in the Table of Finishes in accordance with Schedule Part 8 Review Procedure and shall demonstrate the finished quality standards of certain specific fittings and finishes that will be constructed by Project Co during the design and construction stages. Project Co will create these mock-ups that will form the benchmark for quality control of site operations.

Project Co shall also select finishes which do not give rise to offensive odours developing. Accordingly, finishes shall be selected with due regard to usage, potential spillage and cleaning regimes (details provided in Sub-Section E) and health and safety issues in relation to performance and cleaning regime.

Project Co shall ensure that all floor, wall and ceiling finishes include adequate provision for movement joints, in accordance with current recommendations, to cater for any movements of the structure and/or the background material of the finish. Project Co shall ensure that the location and detail of the joints shall be fully co-ordinated with the overall interior design. Project Co shall indicate the position of all movement joints on drawings to be submitted as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

The use of inspirational colour patterning, motifs and texture shall be considered by Project Co in appropriate areas throughout the building. Where carpeted areas are required due consideration shall be given by Project Co to the use of durable wool-rich carpets if appropriate to the room function.

Project Co shall submit to the Board for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement the decoration for the Teenage Cancer Trust accommodation.

Where possible, internal surfaces shall allow cleaning and repair of elements that may be vandalised, with the minimum of effort.

#### 5.13.2 Flooring

Project Co shall ensure all level, stair treads and nosings, and inclined flooring shall meet the following minimum slip resistance requirements:

- a) "Pendulum Test Value" of 36 or greater (when either dry or contaminated); and
- b) "Rz surface micro-roughness (microns  $\mu$ m)" of 20  $\mu$ m or greater for water-wet, low activity pedestrian areas.

Project Co shall procure that test results in the "installed" condition are independently verified by the Health & Safety Laboratory, Buxton, Derbyshire. The pendulum test shall be performed using a pendulum-coefficient of friction instrument with "Four-S" rubber (Standard Simulated Shoe Soil) and Slider 55 rubber, in accordance with approved HSE test methodology.

For the avoidance of doubt, the obligation to follow the pendulum-coefficient of friction methodology is a specific obligation and is derived from the HSE, which is their preferred method of test.

Project Co shall ensure that all entrances to the Facilities incorporate sufficient length of appropriate floor matting designed to remove contaminants including water, dirt and leaves from footwear, trolley wheels etc. A water evaporation system such as a hot air curtain shall be provided at each entrance.

All floor finishes shall comply with SHTM 61 and have low absorption, low radius of ignition and low dirt retention.

Project Co shall comply with all of the recommendations provided in SHS Safety Action Notice SAN(SC)05/08.

Project Co shall prepare a Flooring Finish Selection Matrix in accordance with SHTM 61, 2009 in order to demonstrate to the Board that the selected finishes are suitable for their locations.

The particular conditions in the plaster suite accommodation shall be taken into account when selecting floor finishes.

# 5.14 Partitions

Project Co shall ensure partitions address special construction requirements including x-ray protection and gamma ray shielding i.e. concrete or lead. It is important that Project Co comply with the shielding requirements from the Board's Radiation Protection Advisor.

Partitions shall be designed to take account of following criteria:

- a) Structural strength of overall partition, and adequacy of support for fittings, fixtures and equipment, both planned and future;
- b) Sound reduction;
- c) Fire resistance;
- d) Moisture resistance;
- e) Resistance to biological infection;
- f) X-ray shielding;
- g) Gamma ray shielding; and
- h) Protection from damage.

#### 5.15 External Materials

Project Co shall ensure that selected materials are robust and durable. The choice of materials for cladding and external surfaces shall comply with the performance levels of the Board's Construction Requirements and provide an appropriate design solution in terms of quality, scale, colour, texture, serviceability, statutory and environmental requirements.

#### 5.16 Architectural Hardware

The locking system shall be fully suited across the Facilities, and shall interface with swipe card/other entry systems where provided. The locking system shall interface with the Board's existing 'swipe card' or other electronic entry systems currently employed at the RIE Facilities. Particular requirements with respect to electronic door access / security requirements are contained in paragraph 9.19.6.

#### 5.16.1 Ironmongery

Project Co shall provide ironmongery which shall enhance the overall quality of the interior design concept. Project Co shall ensure ironmongery is of robust construction suitable for its specific purpose and usage characteristics and in accordance with the Room Data Sheets. For ease of use by elderly or disabled persons Project Co shall ensure handles are colour contrasted with the door background colour and of easy grip design.

Samples of all the ironmongery products shall be prepared in accordance with paragraph 2.3 and paragraph 5.5. The lock suiting information is to be provided as Reviewable Design Data for review in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement post Financial Close. This is so that details of lock suiting will be submitted by Project Co to the Board to allow adequate time for discussion and amendment if necessary before the fittings are required for installation in the buildings. All door closers shall be fully adjustable.

#### 5.16.2 Blinds & Curtains

Project Co shall select blinds and curtains to relate to the overall interior design concept and to the specific requirements for each in relation to colour, pattern, material, fire resistance, non-flammability, opacity, light reflectance and light absorption. Blinds and Curtains shall be Class O rated. Windows in clinical areas shall be fitted with disposable curtains. Windows in non-clinical areas shall be fitted with blinds that are of the non-disposable type.

Project Co shall ensure that materials for blinds and curtains shall also comply with the requirements of the Board's Head of Service Infection Control for cleaning, washing and maintenance, and comply with SHFN 30 and SHTM 87 and relevant Safety Action Notices. All blinds and curtains shall be compliant with anti-ligature requirements.

The locations and fixings for both blinds and window curtain tracks shall be co-ordinated by Project Co with the window and internal window sill design from the outset of the building design development and the fixings shall be designed by Project Co to take the proposed maximum loadings possible for the tracks concerned. Curtain tracks shall be designed by Project Co to overlap the window openings so that they do not allow light to pass into the room when drawn. Controls for blinds and curtains shall be co-ordinated by Project Co with the window design and its opening gear, including any operating handles, levers or stays that may be required and shall be located conveniently for staff or patients to operate as appropriate.

Project Co shall fix bed curtain tracks at the height recommended in the relevant guidance and Project Co shall ensure bed curtain tracks are co-ordinated with other service outlets and the window positions, where applicable. An adequate ventilation gap must be provided by Project Co at the curtain head.

Where Project Co are required to provide "vistamatic" blind type controls to observation panels, doors and screens, appropriate sight lines shall be maintained into single bedrooms and counselling / interview rooms.

Where blinds are required for privacy reasons, but are deemed not to meet the infection control criteria for a particular area then Project Co shall provide an alternative means of ensuring that privacy is maintained.

# 5.17 Hand Washing Facilities

Project Co shall ensure that all hand washing facilities comply with CEL 03 (2012) Water sources and potential infection risk to patients in high risk units and in clinical areas are provided with sensor taps and electronic valves to the supply spouts and that they shall conform to SHTM64 in all relevant respects; particularly;

- a) Single spout mixer to achieve correct temperature;
- b) Water temperature thermostatically controlled; and
- c) Supply and waste connections to concealed services.

# 5.18 Staircases, Ramps, Balustrades, Walkways, Escalators & Lifts

Where staircases, ramps, balustrades, walkways, escalators and lifts are provided in addition to those required to satisfy means of escape criteria, these shall be designed to relate to the anticipated capacity of use and clearly designated for public, staff or service circulation.

Where ramps are provided in addition to those required to satisfy means of escape criteria these shall be suitable for independent and/or assisted wheelchair users, trolleys and ambulant disabled people.

Dependent on the nature and configuration of the Project Co's design proposals, Project Co may be required to provide staircases for fire fighting access, smoke control, dry and wet riser provision agreed with The City of Edinburgh Council's Building Control Department and the Scottish Fire and Rescue Service.

Particular attention shall be given to evacuation lifts where there may be a high percentage of wheelchair users on upper floors.

Any passenger or bed / passenger lifts required for vertical transportation shall have a minimum clear entrance of 1300 mm.

#### **5.19 Soft Landscaping Requirements**

Project Co shall incorporate areas of soft landscaping into the Facilities to complement both buildings and hard landscaped areas' of the Site and the adjacent areas of the Retained Site in accordance with the requirements of paragraph 7.1.

# 5.20 Wayfinding & Signposting

Wayfinding shall be so designed to meet the needs of different groups of people coming onto the Site, such as children, the elderly, the physically and visually impaired, as well as for service delivery purposes and contractors.

Signs shall be consistent to the end of the journey, identify functional specialities to facilitate the separation of different clinical zones.

Signposting from parking areas to entrances shall be clear and unambiguous.

Project Co shall observe the guidance and advice referred to in paragraph 2.2 General Design Issues item b.

Non-specialist language shall be used. Consideration shall be given to the use of iconic and pictorial signs as an alternative to written words.

#### 5.21 Wall Protection

Project Co shall establish the most suitable form of protection at the most effective height location and orientation that shall prevent direct impact with the building fabric, its fixtures and fittings. SHTM 69 provides guidance and recommendations on this subject.

Project Co shall undertake a detailed review of those pieces of mobile equipment both Clinical and Non-Clinical, that are expected to be used by the Board and Project Co within the Facilities. This review shall include a process of risk assessment and shall be organised to determine the type and extent of protection that is required to the building fabric. Project Co shall submit the findings of the review to the Board as Reviewable Design Data for review by the Boards (in particular the Board's Radiation Protection Adviser) in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement. Project Co shall comply with the findings of the review including providing the design and construction required by the review.

Project Co shall be required to demonstrate that the proposal provides the most effective height, location and orientation of protection that shall prevent direct impact with the building fabric.

Mobile equipment currently used by the Board includes (but is not limited to) the following, however Project Co shall be responsible for establishing a comprehensive schedule of all mobile equipment and associated dimensions sufficient to inform the design:

 Cots / Incubators / Beds / Patient Trolleys / Mobile X Ray Machines / Resuscitation Trolley's / Mobile Ultrasound Machines / Mobile EEG / Retrieval Team Equipment / Mobile Hoists / Wheelchairs / Food Trolleys / Mortuary Box / Supply delivery trolleys / Cleaning Equipment - Hoovers/Washers / Disposal Holder collection trolleys / Linen Trolleys / Sterile Supply Trolleys

Project Co shall endeavour to minimise the extent of impact damage incurred by ensuring corridors are free of awkward corners / obstructions. Project Co shall ensure that doors in corridors are of sufficient width to accommodate all forms of hospital traffic and shall, where necessary, be designed to be held in the open position or to automatically open where appropriate.

A combination of some or all of the following forms of protection would be deemed appropriate in corridors and hospital streets:

- a) Crash rails;
- b) Defensive coves; and
- c) Corner treatment and reinforcement.

Exposed services such as ducts, radiators and pipework can be badly damaged when struck by trolleys etc. Project Co shall incorporate measures to avoid damage to these elements.

# 5.22 Static Discharges

Project Co shall seek to eliminate, by choice of material coupled with control of the environment the release of static charge, in accordance with the recommendations contained in SHGN Static Discharge (1999).

Project Co shall co-operate with the Board in the production of relevant risk assessments in accordance with HTM 00-07 "Resilience planning for the healthcare estate".

#### 5.23 Standardisation & Prefabrication

The use of standardised / prefabricated elements and building components to achieve good quality control, ease and speed of installation and flexibility for future use is welcomed. Their use shall ensure Operational Functionality can be achieved and offering value for money.

In order to take advantage of the repetitive nature of construction, maximise productivity and efficiency and minimise construction periods and waste, consideration shall be given to off-site prefabrication. It shall specifically be applied to repetitive elements e.g., sanitary assemblies, bathrooms or complex equipment such as plant assemblies.

Project Co shall adopt standardised and / or pre-fabricated components and elements of construction which improve product quality, guarantee consistency of performance enhance efficiency of maintenance, and provide flexibility for future changes, ease of replacement and value for money.

#### 5.24 Materials

Project Co shall ensure that all materials incorporated into the works shall comply with the requirements of The Construction Products (Amendment) Regulations 1994, and all other parts of the Board's Construction Requirements.

Project Co shall ensure that all products and materials to be incorporated into the Facilities shall be of sound and satisfactory quality and unless otherwise agreed by the Board shall be new. Project Co shall not construct the Works utilising substances which are hazardous to health, including but not limited to substances referred to as being hazardous to health and safety in The Control of Substances Hazardous to Health (Amendment) Regulations 2002 and The Control of Substances Hazardous to Health (Amendment) Regulations 2004.

Where materials and components are not specifically identified as complying with The Construction Products Regulations 2013 and any subsequent amendments, Project Co shall ensure that they comply with the relevant British Standards, Eurocodes and Codes of Practice. Where materials and components are available in varying qualities complying with two or more of the relevant regulations or standards, the higher quality products shall be used.

Project Co shall ensure that the whole quantity of each product and material required to complete the Works is of a consistent type, size, quality and overall appearance and is fit for its intended purpose. Project Co shall ensure all products and materials are handled, stored, prepared and used or fixed strictly in accordance with the manufacturers' written instructions or recommendations and not be damaged when incorporated into the Works.

Project Co shall not construct the Works utilising substances which are hazardous to health, including but not limited to substances referred to as being hazardous to health and safety in "The Control of Substances Hazardous to Health (Amendment) Regulations 2004"

Project Co shall ensure that:

- a) the materials selected or specified by or on its behalf for use in the Facilities (or any part or parts thereof) are in accordance with the guidance contained in the Good Practice Guidance for selecting materials and this paragraph 5.24; and
- b) there shall not be specified for use nor shall there be incorporated or used in connection with the Facilities any materials or substances which are expressly prohibited by the Project Agreement or any part of it or which are generally known not to be in accordance with British or European Standards and Codes of Practice at the time of specification or use (as applicable), or any materials or substances which are deleterious to health and safety or to the durability of buildings and/or other structures and/or finishes and/or plant and machinery in the particular circumstances in which they are used, or any materials or substances identified as deleterious, unsatisfactory or unsuitable in the relevant circumstances in the Good Practice Guidance for selecting materials and, in addition to and separate from the foregoing, any substances or combination of substances publicised prior to the time of construction in any Building Research Establishment Limited ("BRE") publications issued as part of the BRE Professional Development service which the BRE recommend are not used for building purposes or for the type of buildings comprised in the Project.

Project Co shall obtain confirmation that all timbers are "Certified Wood".

Project Co shall certify at the Actual Completion Date that none of the materials, products or constructions defined as not being appropriate above have been used in the construction of the Facilities, or incorporated in them, other than where specific written consent from the Board has been obtained. Project Co shall also notify the Board of any other material which may become designated as prohibited at any time after incorporation into the project, during the Project Term.

# 5.25 Sustainability

Project Co shall promote sustainable development by demonstrating an integrated approach to the social, environmental and economic well-being of the area served, now and for future generations. The Facilities shall also reflect the objectives of any local agenda strategy supported by The City of Edinburgh Council including Edinburgh Standards for Sustainable Building (2010).

Project Co shall design the Facilities to support the environmental services and to conserve and utilise energy in line with the Climate Change Scotland Act 2009 and the public sector duty to meet national targets of 42% reduction of CO2 emissions arising from burning of fossil fuels and 80% by 2050. NHSScotland HEAT targets on energy conservation and CO2 emissions are in place to meet the requirements of this public sector duty. The design of the environmental control system shall be co-ordinated and integrated with the design of the structure and the occupied areas in order to maximise the control and flexibility of the installations.

A grey water recycling scheme should be assessed for applicability in this project.

Project Co shall promote sustainable development by demonstrating an integrated approach to the social, environmental and economic well-being of the area served, now and for future generations. Project Co shall ensure that the design and completed Facilities comply with the recommendations of Local Agenda 21, including reflecting the objectives of any Local Agenda 21 strategy supported by The City of Edinburgh Council.

The Facilities shall, as far as reasonably practicable, deliver benefits to the environment. Project Co shall:

- a) Implement a strategy to meet the BREEAM requirements outlined in 5.25.1 below;
- b) Minimise waste during construction and operation;
- c) Using Corporate Greencode, implement an Environmental Management System (EMS) for accreditation aligned to ISO 14001;
- d) HTM 07-07 Sustainable Health and Social Care Buildings: Planning, design, construction and refurbishment;
- e) Reduce the use of fuels which contribute to ozone depletion, global warming, air and water pollution and depletion of non-renewable resource;
- f) Respect the local landscape and protect natural habitat and species and comply with the UK Biodiversity Action Plan;
- g) Avoid sources of ionising and electromagnetic radiation to the extent determined by the relevant HTM;
- h) Avoid any design features associated with sick building syndrome;
- i) Maximise the opportunity for waste minimisation and re-cycling;
- j) Maximise efficient and effective removal and transport of waste;
- k) Adopt maintenance regimes which maintain optimum performance;
- I) Where possible avoid the use of harmful building products and processes; and
- m) Explore the use of prefabricated elements to achieve good quality control, ease and speed of installation and flexibility for future use;
- n) Project Co shall comply with the relevant NHS Requirements, including, but not limited to:
  - 1. The development of a Local Environmental Strategy in line with sustainable development in NHS;
  - 2. New environmental strategy for the National Health Service;
  - 3. Corporate Greencode;
  - 4. Good Corporate Citizenship Assessment Model (GCCAM);
  - 5. Carbon/ energy management in healthcare; and
  - 6. The Board's target of utilising some 20% of renewable energy sources shall be achieved by Project Co.

Project Co shall design the Facilities to support the environmental services and to conserve and utilise energy. The design of the environmental control system shall be co-ordinated and integrated with the design of the structure and the occupied areas in order to maximise the control and flexibility of the installations.

#### **5.25.1 BREEAM**

Project Co shall ensure that the Facilities achieve as a minimum a "Very Good" rating when assessed against BREEAM 2011 New Construction (SD5073).

Under the BREEAM 2011 New Construction (SD5073) there are now mandatory requirements specifically under energy, CO2 emissions, water and ecology. In addition, BREEAM embraces energy efficiency and passive design strategies for ventilation and thermal control to enhance

internal comfort. The Facilities shall therefore also meet a BREEAM ENE1 target of 6 credits (excellent) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.ENE1

BREEAM requires a design stage assessment, carried out and completed before construction starts on site, by Project Co. In addition a post construction review is required at completion carried out by Project Co. The post construction review assesses "as built" specifications and actual construction practice on site and shall maintain the 'Very Good' rating.

BREEAM Pre-assessment is in the Disclosed Data...

# 5.26 Energy Strategy

Project Co shall provide Facilities that achieve an optimum level of energy and utility conservation. Project Co shall:

- a) Minimise internal areas requiring mechanical ventilation;
- b) Minimise direct solar gain to avoid air conditioning/comfort cooling;
- c) Maximise daylight factors in staff, patient and visitor areas;
- d) Maximise utilisation of plant and systems;
- e) Maximise control and flexibility of the installations; and
- f) Ensure that the Facilities are designed and built to facilitate their operation in accordance with the Corporate Greencode.

Project Co shall provide Facilities that achieve a maximum water consumption target of 170,000 litres/bed/year and include measures that they propose to allow the Board to minimise consumption.

Project Co shall take due account of developments in Information and Medical Equipment Technology and any potential impact that this technology may have on the Energy Strategy for the buildings. Particular attention shall be paid to potential opportunities for heat gain within the Facilities provided due to the installation of additional or higher performance plant and equipment.

### **5.27 Fire Planning Strategy**

Project Co shall demonstrate in the design for the Facilities a clear understanding of the policies and principles underlying fire safety in NHS premises.

In all cases the proposed fire strategy shall be fully co-ordinated and be agreed with the Scottish Fire and Rescue Service, The City of Edinburgh Council's Building Control Department and the Board's Fire Officer. Any proposals which deviate from the stated requirements of The Building (Scotland) Regulations 2004 and The Building (Scotland) Amendment Regulations 2011, SHTM 81 and SHTM 82, shall be supported by a specialist fire engineer's report which provides a clear understanding of the risks and protection measures to be included. Calculations and supporting information shall also be provided.

The Fire Planning Strategy shall recognise the Clinical Adjacency with respect to MDCU and the neighbouring medical inpatient beds and shall not separate these areas by a fire compartment wall.

# 5.28 Storage of Gas Cylinders

Project Co shall ensure that all gas cylinders, whether they are connected to external supplies or not, are stored in accordance with SHTM 2023.

Signage must be sited and designed in accordance with the Health and Safety (Safety Signs and Signals) Regulations 1996, BS 5499-10:2006 Safety signs, including fire safety signs - Part 10: Code of practice for the use of safety signs, including fire safety signs and the Health and Safety at Work Act 1974.

#### **5.29 Radiation Protection**

Project Co shall be responsible for the design and build of clinical and support facilities where exposure to ionising radiation might occur. This includes the use of x-rays, CT scanners and gamma cameras, and radioactivity (both in the form of sealed and unsealed sources).

Areas where ionising radiation is used shall require the walls, ceilings, floors, doors and screens to act as radiation shields. The design of the Facilities shall be compatible with specialised operational procedures, employed by the Board in order to ensure the health and safety of staff, patients and the public in radiation areas.

Project Co shall comply with the requirements of the Board's Radiation Protection Advisor to ensure that the Facilities combined with the Board's working practices provide adequate radiation protection.

Project Co shall submit proposals for providing screening to rooms containing radiology or other equipment emitting ionising radiations. These must be submitted to the Board as Reviewable Design Data for review by the Boards (in particular the Board's Radiation Protection Adviser) in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

#### 5.29.1 The Designing-in of Radiation Protection

Adequate restriction of the radiation exposure of patients, staff and the public cannot be achieved by considering in isolation either the design of the Facilities, or the working practices to be adopted within it. The inter-relationship of the design of the Facilities and systems of work will be crucial in determining whether or not procedures can be completed quickly and efficiently and thus with the minimum irradiation of staff. Accordingly Project Co shall comply with the requirements of the Board's Radiation Protection Advisor and the operational managers of the relevant services.

Dedicated x-ray rooms and other appropriate areas require the walls, ceilings, floors, doors and screens to be shielded.

X-ray rooms and other appropriate areas are controlled areas whenever an exposure is in progress. The usual practice is to use electrical signs that illuminate at the room entrances when an exposure is underway.

Diagnostic x-rays are taken in other areas, e.g. operating theatres. The workload and x-ray energies involved will determine the amount of shielding required.

#### 5.29.2 Work with Radioactive Materials

Project Co shall make provision so that arrangements can be made to monitor waste prior to being removed for disposal and linen prior to being sent for laundering.

A combination of shielding and speed of operation is required to avoid causing high radiation exposures to patients, staff and others.

Unsealed-source therapy also leads to the production of solid items and waste contaminated with radioactivity (e.g. clothing, food remnants, linen etc). Some can be disposed of by disposal or by maceration. The rest will need to be stored by Project Co in a secure shielded store away, from clinical area, until the radioactivity decays to background levels.

# 5.29.3 Transport, Delivery & Collection of Radioactive Materials

The arrangements for delivery, collection and storage of radioactive materials need to guarantee the safety of the materials in transit at all times. Appropriately trained staff must be used for moving radioactive packages both within the Facilities and by road. This shall require provision of short term parking.

Project Co shall give consideration to establishment of designated routes for the frequent transport of radioactive sources.

# **5.30 Static Magnetic Field Protection**

The siting and planning of facilities for the use on patients of magnetic resonance imaging (MRI) shall pay particular attention to the characteristics of the equipment required and the need to screen unwanted radio signals from interfering with the MRI equipment and conversely the signals arising from the MRI equipment interfering with equipment elsewhere.

In areas where it is proposed to install MRI equipment Project Co shall ensure that effective magnetic fringe field protection is provided around such areas in accordance with the equipment suppliers' recommendations. Project Co shall discuss and agree proposals as Reviewable Design Data for review in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement for any such screening with the Board prior to the installation of the MRI equipment.

The design of the Facilities shall be compatible with the specialised operational procedures employed by the Board in order to ensure the health and safety of staff, patients and the public in areas where this type of equipment is to be installed.

Project Co shall ensure that adequate provision for the removal, and replacement, of the equipment is provided and Project Co shall be responsible for agreeing with the equipment supplier reinforced routes through the Facilities, suitably sized access panels in walls, suitable ceiling heights, corridor widths and door openings to facilitate equipment replacement.

The design of the Facilities internally and externally, the patient journey and the construction of the buildings shall recognise the hazards associated with the powerful magnetic fields generated by the imaging equipment.

# 5.31 Electromagnetic Interference Protection

The siting and planning of facilities for the use on patients of Electroencephalography (EEG) and Evoked Potential Recordings shall pay particular attention to the characteristics of the equipment required and the need to screen unwanted electromagnetic signals from interfering with the EEG and Evoked Potential Recordings equipment and conversely the signals arising from the EEG and Evoked Potential Recordings equipment interfering with equipment elsewhere. Project Co shall comply with the requirements of SHTM 06-01.

Areas where electromagnetic interference will occur shall require the walls, ceilings, floors, doors and screens to act as electromagnetic interference shields. Project Co shall submit proposals for providing screening to rooms containing (EEG) and Evoked Potential Recordings equipment or other equipment emitting electromagnetic interference. These must be submitted to the Board as Reviewable Design Data for approval in accordance with Schedule Part 8 Review Procedure.

The design of the Facilities shall be compatible with the specialised operational procedures employed by the Board in order to ensure the health and safety of staff, patients and the public in areas where this type of equipment is to be installed.

The design of the Facilities internally and externally, the patient journey and the construction of the buildings shall recognise the hazards associated with electromagnetic signals generated by the EEG and Evoked Potential Recordings equipment.

#### 5.32 Facilities Maintenance

The Project Co shall provide Facilities that ensure that the maintenance and replacement of services, finishes, components, elements, systems, furniture and equipment can be carried out effectively within the requirements of clinical operations and functionality.

Project Co shall ensure that the access routes within the buildings shall allow access for the appropriate maintenance / cleaning system, and equipment utilising the hierarchy of control measures included within the Work at Height Regulations 2005 as amended. Appropriate provisions shall be incorporated by Project Co to allow the safe use of the appropriate maintenance / cleaning system including but not limited to safe access to the workplace and equipment. The structural frame, floors and internal walls of the buildings shall be designed by Project Co to accommodate the loading requirements of access equipment and operatives, where the cleaning and maintenance system uses this method.

#### **5.33 Pest Control**

Project Co shall incorporate pest control measures and measures to prevent pest entry to the Facilities.

# 6 Civil & Structural Engineering Requirements

Project Co shall in carrying out the Works comply with the following non-exhaustive list of civil & structural engineering requirements.

Project Co shall take cognisance of all the civil engineering and structural implications of the requirements described in the Board's Construction Requirements in this Schedule Part 6

Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

For the avoidance of doubt the hierarchy of standards and advice detailed in paragraph 2.5 shall apply to this paragraph 6.

#### **6.1 General Requirements**

Project Co shall ensure that the design and construction of the civil and structural engineering elements of the buildings and external works meets the following criteria:

- a) Be fit for their intended purpose;
- b) Be fully co-ordinated with the design of the building fabric, finishes, services, facades, internal walls, medical equipment and existing Site features, including buildings / structures;
- c) Include the design and construction of any secondary framing necessary for the support of plant, services, ceiling mounted tracking hoist systems, other lifting equipment or medical equipment;
- d) Provide adequate space for the distribution of services, while maintaining the required finished floor levels and the floor to ceiling heights called for in the Room Data Sheets, and elsewhere in this Schedule Part 6 Section 3 Sub-Section C;
- e) Maximise the clear zone above the ceilings for services to the degree consistent with overall economy for the Board;
- f) Provide fire resistance required by the appropriate SHTM and HTM, and the requirements of the Scottish Technical Standards;
- g) Be economically adaptable to meet changing clinical needs; and
- h) Require minimum maintenance and be designed to accommodate maintenance requirements for services, equipment and building fabric.

#### 6.1.1 Sewers under the Site

Project Co requires to be aware of the Sewers serving the RIE Facilities and other neighbouring properties on and off the Campus Site part of which Sewers are located within part of the Site as shown coloured green on Plan 11 and Project Co shall ensure that:

- a) No buildings or other erections are to be constructed nor any trees, shrubs, bushes or other plants or vegetation planted, grown, cultivated or permitted to grow over the route of the Sewer or within a lateral distance measuring from the centre line thereof which are likely to adversely affect the Sewer or would impair safe and reasonable access thereto (which shall be not less than 6 metres);
- b) No underground works will be undertaken within a lateral distance measuring from the centre line thereof which may adversely affect the Sewer or would impair safe and reasonable access thereto (which shall be not less than 6 metres).
- c) Access shall be provided at all times to the Board and any Board Party and Consort and any Consort Party to the extent required to maintain, repair and renew the Sewer and in accordance with the requirements in Clause 9 (Nature of Land Interests) of the Project Agreement (as varied, amended or supplemented from time to time in accordance with the Project Agreement; and

d) Project Co shall be fully responsible for the consequences of failing to comply with these requirements and the losses which may be suffered or incurred by the Board and/or any Board Party and/or Consort and/or any Consort Party as a result of any act or omission of Project Co and/or a Project Co Party exercising any of the rights and/or performing any of its obligations and/or failing to do so and the provisions of Clause [49.1.6] of the Project Agreement shall apply.

# 6.1.2 Gas Pipe under the Site

Project Co requires to be aware of the possibility of the gas pipe serving the RIE Facilities part of which may be located within part of the Site and Project Co shall ensure that:

- a. No buildings or other erections are to be constructed nor any trees, shrubs, bushes or other plants or vegetation planted, grown, cultivated or permitted to grow over the route of such service media or within a lateral distance measuring from the centre line thereof which are likely to adversely affect the service media or would impair safe and reasonable access thereto (which shall be not less than 6 metres);
- b. The provisions of paragraph (a) above shall also apply to any service media being located within a lateral distance of 15 metres from the gas pipe measuring from the centre line thereof:
- c. Access shall be provided at all times to the Board and any Board Party and Consort and any Consort Party to the extent required to maintain, repair and renew the gas pipe and in accordance with the requirements in Clause 9 (Nature of Land Interests) of the Project Agreement (as varied, amended or supplemented from time to time in accordance with the Project Agreement; and
- d. Project Co shall be fully responsible for the consequences of failing to comply with these requirements and the losses which may be suffered or incurred by the Board and/or any Board Party and/or Consort and/or any Consort Party as a result of any act or omission of Project Co and/or a Project Co Party exercising any of the rights and/or performing any of its obligations and/or failing to do so and the provisions of Clause [49.1.6] (Indemnities) of the Project Agreement shall apply.

#### 6.2 Architectural / Structural Interface

Structural floors shall be designed to have penetrable zones co-ordinated with the modular framework for partitions and services.

For the avoidance of doubt, structural timber floors shall not be permitted.

Columns shall be located in-so-far, as is reasonably practical to coincide with corridor walls in order to minimise intrusion into rooms or corridors. The relationship of columns, ducts and walls shall permit clear internal room surfaces and not obstruct equipment or fittings.

As far as practical, the walls to vertical service shafts shall be non-load bearing and therefore maximising opportunity for future services installation, alteration and maintenance.

The elevation design shall facilitate distribution of services at the building perimeter.

#### 6.3 Performance Standards

Unless otherwise agreed with the Board, Project Co shall ensure that all structural elements are designed in accordance with current revisions of the following standards:

- a) Eurocode 0 BS EN 1990:2002 Basis of structural design;
- b) Eurocode 1 Series BS EN 1991 Actions on structures;
- c) Eurocode 2 Series BS EN 1992 Design of concrete structures;
- d) Eurocode 3 Series BS EN 1993 Design of steel structures;
- e) Eurocode 4 Series BS EN 1994 Design of composite steel and concrete structures;
- f) Eurocode 5 Series BS EN 1995 Design of timber structures;
- g) Eurocode 6 Series BS EN 1996 Design of masonry structures;
- h) Eurocode 7 Series BS EN 1997 Geotechnical design;
- i) Eurocode 8 Series BS EN 1998 Design of structures for earthquake resistance;
- j) Eurocode 9 Series BS EN 1999 Design of aluminium structures;
- k) BS 8500-1:2006 Concrete: Complementary British Standard to BS EN 206-1. Part 1 Method of specifying and guidance for the specifier;
- BS 8500-2:2006 Concrete: Complementary British Standard to BS EN 206-1. Part 2 Specification for constituent materials and concrete;
- m) BS 8102:2009 Code of practice for protection of below ground structures against water from the ground;
- n) BS 8204 Screeds, bases and in-situ floorings;
- o) BS 5606:1990 Guide to accuracy in building; and
- p) BS 8000 Workmanship on building sites.

Note: Eurocodes 0 to 9 – Corresponding National Annexes shall be used where applicable for Nationally Determined Parameters (NDP).

Construction tolerances, unless otherwise stated by the Board shall be no greater than those specified in Tables 1 and 2 of BS 5606. Where the operational constraints of the buildings require special levels of construction accuracy then Project Co shall be responsible for establishing and designing for these.

The performance of components shall be in accordance with the appropriate British Standards and Eurocodes.

Project Co shall ensure that building structures are designed to resist imposed, roof and wind loads not less than those required by current revisions of Eurocode 1 Series – Actions on structures. Project Co shall ensure that building structures are designed to carry the loads of

heavy plant, the helipad and helicopters and medical equipment (including ceiling mounted tracking hoist systems) in their permanent positions and any loads that will be imposed upon the structures during the installation, removal or replacement of such heavy items. This requirement may involve the design of 'strong routes' through the buildings and / or specially strengthened areas of the roof onto which heavy items can be lifted. These areas and routes shall be identified by Project Co in their design as Reviewable Design Data for review in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement for agreement by the Board. Consideration by Project Co shall also be given to selection of floor screeds which shall have adequate strength and resilience to resist abrasion and indentation from the use of medical equipment.

Project Co shall ensure that any measures considered necessary shall be taken to protect the buildings from ingress of naturally occurring ground gases.

# 6.4 Loadings & Structural Flexibility

The Facilities' structural flexibility shall reflect the overall Adaptability Strategy designed by Project Co. Despite any connection to the RIE Facilities the Facilities are to be free standing and must not rely on any other buildings outwith the Site for support.

Project Co's structures shall be designed to cater for the dead loadings associated with the chosen materials for the structure, finishes, partitions and cladding to the buildings. As a minimum, it shall also be designed for the imposed loads as specified in current British Standards and Eurocodes. The design shall also take into account the need for specialist measures to allow for the installation of special equipment and associated services. Structural deflections shall be limited as necessary for the proper installation and functioning of specified equipment.

Project Co shall account for (but not be limited to) the following loading schedule:

- a) General floor loadings;
- b) Point loads for Clinical equipment and Services;
- c) Impact loads;
- d) Vibration loads;
- e) Special plant foundation loads; and
- f) Service loads.

Project Co shall take account of concentrated point loads from both mobile and stationary plant and equipment. The structure shall incorporate reasonable measures to accommodate updated versions of such machinery without major disruption. In addition, Project Co shall ensure that floors and supporting structures have the capacity for retro fitting lifting devices for all fixed items of plant and equipment weighing 35kg or more.

The Room Data Sheets have indicative details on anticipated items of heavy equipment.

For the avoidance of doubt, the Board recognise that no upper limit has been identified and this information will be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement on a departmental / unit / area basis.

Project Co shall take cognisance of the requirements in specified areas for ceiling mounted tracking hoist systems etc with point loads ranging from 375 kg to 750 kg. The structural capability and configuration of these areas shall allow the Board complete flexibility for reconfiguration and extension of this equipment and / or retro-fitting of future lifting equipment in these areas.

Project Co shall take account of the need for special screeds, raised or lowered floors, ceiling grid support grids and other such measures to allow for the installation of special equipment and associated services.

Project Co shall ensure that specific areas of the Facilities satisfy particular requirements of the Board's operations or equipment in those areas. Relevant constraints may include but are not limited to maximum allowable structural deflections, differential settlement, vibration and the meeting of any specific tolerances. Project Co shall be responsible for establishing and resolving and seeking approval of any such constraints by submitting details to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Project Co shall take account of dynamic loads from general movement of people through to activities such as aerobics, dance or other rhythmic activities that can give rise to adverse harmonic effects that affect the design.

Lateral stability bracing systems shall not obstruct or hinder clinical or non-clinical or any other use and/or operations at the Facilities and without limitation shall not obscure the windows or doors.

The vibration response of the buildings shall comply with the requirements of SHTM 08-01 Acoustics and be compatible with the requirements of the equipment to be installed.

With respect to the Facilities, Project Co shall:

- a) Take due account of future flexibility of the Facilities (in terms of future change of use and / or relocation of equipment);
- b) Specifically make allowance for future flexibility of ceiling mounted tracking hoist equipment in specified areas, including the requirement for re-configuration, extension and / or retro-fitting of lifting equipment i.e. the whole of the specified area shall be structurally capable of accommodating hoist equipment;
- c) Make specific allowance for items of particularly heavy equipment and / or other onerous loading conditions; and
- d) Make specific allowance for installation, transfer and / or removal routes for heavy equipment throughout the Facilities.

Parts of the structure potentially subject to damage from trolleys or vehicles shall be designed with adequate protection to prevent such damage from occurring.

Structural deflections shall be limited as necessary for the proper installation and functioning of special mobile, rail mounted, or fixed equipment.

Project Co shall include, within the design, provision for removal, replacement and upgrading of installed plant and equipment. As part of this element of design, a comprehensive replacement strategy shall be prepared for implementation. This strategy shall, wherever possible, consider how these works can be undertaken whilst minimizing disruption to the function of the completed Facilities.

#### 6.5 Foundations & Sub-structure

All foundations shall be designed by Project Co to Eurocodes to comply with current Codes of Practice taking into account the loadings to be sustained, prevailing ground conditions and the effects of any settlement on new superstructure and on links to adjacent buildings. Proposed solutions shall take account of adjacent foundations or structures and engineering services below ground. Despite any connection to the RIE Facilities the Facilities are to be free standing and must not rely on any other buildings outwith the Site for support.

#### **6.6 Movement Joints**

Structural movement joints shall not be located through:

- a) Theatre rooms;
- b) Treatment and surgery rooms;
- c) X-ray and imaging rooms;
- d) Pharmacy manufacturing rooms;
- e) Kitchens and food preparation areas;
- f) Any room with (now or in the future) with ceiling mounted tracking hoists or other similar lifting equipment;
- g) Any other room requiring a sterile environment; and
- h) Any rooms where there is a risk of biological or other hazard, or risk of penetration by water, grease / oil, or other hazardous or detrimental substance.

Lateral stability bracing systems shall not obstruct or hinder clinical or non-clinical operations and shall not obscure the windows or doors.

#### 6.7 Building Super-Structure & Envelope

Vertical, oblique and lateral loadings from the external walls must be safely transmitted through the structure to the load bearing strata. When under maximum design stress, joints shall maintain full water exclusion properties and design appearance. Despite any connection to the RIE Facilities, the Facilities are to be free standing and must not rely on any other buildings outwith the Site for support.

Project Co shall provide the means for replacing the x-ray equipment during the Operational Term through the external envelope of the rooms housing the x-ray equipment including intermediate support if the equipment is to be transferred into the building from the exterior at upper floors. The external structural solution for the replacement of x-ray equipment shall not adversely impact on architectural appearance of the Facilities. Project Co shall provide the means of replacing the x-ray equipment to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

In addition to providing safe, aesthetically pleasing and durable structures, the structural design must enable the required clear spaces to be achieved with adequate provision of services taking into account maintenance and replacement during the operational life of the buildings. The design must consider construction methods and future maintenance and demolition of the structures and make provision for these to be carried out safely.

The environmental criteria to be applied in confirming the design performance shall be assessed and confirmed by Project Co. Formal testing of elements of the construction by a recognised testing authority will be required as part of the approval process.

#### 6.8 Fire & Corrosion Protection

Project Co shall provide fire protection to all elements of structure and ensure fire ratings are in compliance with space use and the more onerous of Scottish Technical Standards / the Board's requirements. When the more onerous requirement is to be used the Board will have the right to decide what constitutes the more onerous requirement.

## **6.9 Durability & Maintainability**

All elements of the structure shall be capable of withstanding potential deterioration due to weather, ground conditions, wear and tear, and accidental damage relevant to their location and environment.

Where the requirement for maintenance is less than the required life expectancy of the element(s) practical and realistic arrangements shall be designed into the construction of the Facilities to allow for any necessary repairs, replacements, and painting etc. to be carried out safely without compromising the operational activities within and around the Facilities.

## **6.10 Other Performance Requirements**

Project Co shall ensure that all building elements and retaining structures shall incorporate appropriate means to resist the passage of dampness, both into the building structure and fabric, and into the accommodation, including the resistance to any hydrostatic pressure. Project Co shall ensure that all such construction shall be in accordance with the requirements of The Building (Scotland) Regulations 2004 and its amendments, BS 8102 and Code of Practice CP 102 for Protection of Buildings against Water from the Ground.

### 6.11 Drainage

Project Co shall design and provide separate foul and surface water drainage systems in accordance with the requirements of The Building (Scotland) Regulations 2004 and its amendments.

Project Co shall be responsible for liaising with Scottish Water to agree connection requirements to the surrounding public sewers and for compliance with relevant provisions of paragraph 4 and paragraph 6.1.1 as regards sewers.

Project Co shall provide, where necessary within the on-site drainage network any isolators, grease traps, retention traps, interceptor tanks and other such devices necessary to prevent the discharge of any potentially dangerous or otherwise contaminative materials to the public sewers.

Foul and surface water drainage shall be designed on separate systems and shall discharge into the existing systems, subject to necessary approvals and for compliance with relevant provisions of paragraph 4 as regards surface water drainage.

Surface water discharge shall be in accordance with the following requirements:

- a) A SUDS system designed and constructed in accordance with the Regulations and the guidance contained in 'SUDS: Design Manual for Scotland and Northern Ireland';
- b) Water Environment (Controlled Activities) (Scotland) Regulations 2005;

- c) A public sewer provided under the Sewerage (Scotland) Act 1968 and amendments;
- d) An outfall to a watercourse that complies with any notice and / or consent by SEPA.

SUDS features shall be designed as an integral part of the landscaping.

The drainage systems shall be designed to require no regular maintenance other than the cleaning of gully traps etc. and access for maintenance shall be provided to all drainage runs.

All drainage shall be designed to avoid the risk of local flooding and flooding of the system into which they discharge and/or to properties and/or land served by such systems. Flooding of electrical equipment areas and areas where stray current leakage may occur in the presence of water shall be prevented.

Drainage shall be sufficient to ensure that no areas of standing water occur within the design criteria of the relevant authority. The drainage systems shall be capable of coping with, as a minimum, the foul loading and the storm event specified by the relevant authority and shall be considered an integral part of the public sewerage system. The drainage system shall be capable of taking such detritus as may normally arise during the operation of the system and during normal and winter maintenance conditions and those within the design criteria of the relevant authority.

A free passage of air shall be maintained through the foul drainage system.

Flat roofed areas wherever possible shall be drained to eaves gutters. Where such roof is enclosed, without eaves, it shall be drained by a minimum of two grated roof outlets and rainwater pipes, which shall be designed to pass the design rate of run-off assuming one outlet or 33 per cent of the outlets are out of use, whichever is the greater number.

Project Co shall design the drainage system in such a way as to minimise the requirement for internal manholes.

Project Co shall construct the drainage installation such that it complies with the Initial Drainage Proposal and shall comply with relevant provisions of paragraph 4 as regards drainage installation.

# 7 External Works

Project Co shall design and construct an external works environment for the Facilities that fully integrate with the buildings.

Project Co shall design the external works for ease of navigation around the site by staff, patients and visitors.

Project Co shall appoint an appropriately qualified professional and prepare a comprehensive hard and soft landscaping scheme.

In preparing the hard and soft landscaping scheme for the external works, Project Co shall ensure that due account is taken of the Board's requirements with respect to the integration of artwork.

Project Co shall select external works materials on the basis of the following:

a) Accessibility;

- b) Appropriateness;
- c) Durability;
- d) Robustness;
- e) Compatibility;
- f) Maintainability;
- g) Suitability for life cycle replacement;
- h) Co-ordination with other finishes; and
- i) Suitability for infection control
- i) Health and Safety attributes
- k) Life Expectancy set in paragraph 5.1;
- I) Easy of future maintenance;
- m) Appearance.

In preparing the hard and soft landscaping scheme for the external works, Project Co shall ensure that due account is taken of the Board's requirements with respect to the integration of artwork.

Project Co shall carry out landscaping works outwith the Site boundary in the Yellow Area and Hatched Orange Areas in accordance with the relevant provisions of paragraph 4. All landscaping works shall be compatible with the adjacent parts of the external environment at the Retained Site.

Project Co shall seek advice from the Board to seek to minimise the risk of crime and vandalism on the Facilities. This advice shall be pro-actively sought by Project Co as part of the design process.

Project Co shall seek advice from Lothian and Borders Police's crime prevention representative on the proposals for external works to minimise the risk of crime and vandalism on the Site and the Facilities.

Where possible, Project Co shall ensure that external surfaces allow easy cleaning of vandalised elements, with the minimum of effort.

Project Co shall provide the following principal elements:

# 7.1 Soft Landscaping Requirements

Project Co shall design, as an integral part of the Facilities, a soft landscaping scheme that will enhance the environment of the Facilities.

The soft landscaping shall be easy to maintain, and plants and shrubs shall reach a state of maturity within three years of Actual Completion Date.

The design of landscaping and selection of plants and shrubs shall aid the reduction in risk of crime.

Project Co shall ensure that the landscaping and gardens are designed in accordance with the following:

#### 7.1.1 General

Project Co shall involve the Board in the decision making process for all proposed planting for the Facilities details of which shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement.

Project Co shall carry out accurate site surveys prior to design of soft landscape to determine site levels and identify on survey drawings all existing features including any existing mature trees.

Project Co shall by reference to their own ground investigation data; confirm the need for imported topsoil or whether amelioration of existing soil is sufficient to support their soft landscaping proposals. Project Co shall then provide new or utilise existing soils, as appropriate.

Project Co shall carry out any necessary remedial measures to suit planted areas and hard landscaped areas.

### 7.1.2 Soil Preparation & Topsoil

Soil preparation shall be carried out by Project Co in accordance with BS 4428:1989, Code of practice for general landscape operations (excluding hard surfaces). Project Co shall ensure care is taken with the use of weed-killers. Project Co shall ensure that all topsoil complies with BS 3882:2007, Specification for topsoil and requirements for use.

# **7.1.3 Trees**

Project Co shall ensure that any work to existing trees, whether or not covered by Tree Preservation Orders, shall only be undertaken with the appropriate licence as stipulated by the Tree Preservation Order or with the approval of The City of Edinburgh Council.

Project Co shall ensure that tree protection complies with BS 5837:2012, Trees in relation to design, demolition and construction - Recommendations. A register of the existing trees shall be made including giving each tree a unique number. Before construction commences Project Co shall take photographic records of the existing trees on and adjacent to the Site. The photographs shall record the trees' unique number. A site plan shall record the position of the existing trees noting their unique number.

# 7.1.4 Shrubs & Groundcover

Project Co shall ensure that all shrubs shall comply with BS 3936 Part 1:1992, and shall be planted to BS 4043: 1989.

Project Co shall ensure that shrub and groundcover protection complies with BS 5837:2012, Trees in relation to design, demolition and construction - Recommendations. A register of the

existing shrubs and groundcover shall be made including giving each shrub and area of groundcover a unique number. Before construction commences Project Co shall take photographic records of the existing shrubs and areas of groundcover on and adjacent to the Site. The photographs shall record the shrubs and areas of groundcover's unique number. A site plan shall record the position of the existing shrubs and areas of groundcover noting their unique number.

# 7.1.5 Planting & Watering

Project Co shall ensure that planting and watering is carried out while soil and weather conditions are suitable for relevant operations.

#### 7.1.6 Turf

Project Co shall ensure that turf is in accordance with BS 3969:1998, Recommendations for Turf for general purposes. Turf shall be free from undesirable grasses and weeds.

Project Co shall avoid grass in courtyards, unless the courtyard is very large. If provided Project Co must ensure there is a suitable, sufficiently wide access away from occupied areas for bringing mowing machinery to the turfed areas.

### 7.1.7 Health & Safety Considerations

Project Co shall ensure that all weed-killer / pesticides and herbicides and any other chemicals used in association with the landscape works preparation comply with SEPA regulations, the COSHH Regulations, and any other relevant regulations applying to hospital sites.

# 7.2 Therapy Gardens

The landscaping and therapy gardens provide an opportunity to soften the whole image of the Facilities by a visual presentation of quality and sensitivity that relates to pleasure and emotion rather than the essential clinical impressions that will inevitably be gained by users and visitors.

The gardens shall be easily accessible from the units / departments. It shall be secure and provide space for therapy and privacy. The needs of the patients will be varied and descriptions of their needs can be found in the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements) for the individual departments / units.

Certain parts of the therapy gardens shall be open for general use; other parts shall be private for use by specific patient groups.

The therapy gardens shall be available 24/7, 365 days a year. Attention shall be paid to the lighting of the gardens to allow use after dark and to enable the gardens to be enjoyed in the evenings when viewed from inside the building. Attention shall also be paid to providing covered / heated areas to allow the external environment to be enjoyed in different weather conditions.

All paved areas shall be wheelchair accessible and constructed using non-slip materials. Handrails shall be provided at intervals to allow ambulant disabled people equal access to the gardens. There shall be a number of paved areas thus allowing a number of 'walks' throughout

the garden areas, away from the road network and car parks. Kerbs to the paved areas are necessary to avoid the risks of wheelchairs becoming stuck in soft earth.

Seating shall be provided throughout the garden areas. This shall be of a range of styles and heights so that it suits the needs of all service users. Protection from wind and some covered areas shall be provided throughout the garden(s).

## 7.3 Site Boundary Requirements

No work shall commence on Site until the details of the proposed boundary treatment have been submitted to and approved by The City of Edinburgh Council.

Project Co shall provide boundaries to the Facilities, which provide security, appropriate visual screening and essential maintenance access. Project Co shall engage the Board in the design process for all boundaries details of which are to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with paragraph 1.2.3 of Schedule Part 8 (Review Procedure), Table of Finishes and clause 12.6 of the Project Agreement.

Where appropriate, proposals for the Site boundary treatment shall comply with the relevant parts of BS1722: Fencing.

#### 7.4 Site Access & Circulation

Always subject to complying with the relevant provisions of paragraph 4 and Clause 9 (Nature of Land Interests of the Project Agreement as regards access for pedestrian and vehicular access on and around the Campus Site, the entrances and exits to the Facilities shall be clearly defined and signed; their design shall enhance ease of movement from and to the public roads. The road system shall be designed to facilitate safe, convenient routes separating transportation groups as far as practical. Attention is to be given to provide clear and well defined routes for emergency vehicles, fire, police and ambulance. The requirements of the Firecode in relation to 'Site Access' shall be considered.

All of the access requirements shall satisfy the requirements of the Board and The City of Edinburgh Council.

Project Co shall define as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement and seek agreement of The City of Edinburgh Council for the creation of additional pedestrian and / or emergency road access points to suit the specific requirements of the final design.

The colour of the road surfaces shall be black and all footpaths shall satisfy the requirements of the Board details of which are to be provided as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, and the requirements of The City of Edinburgh Council.

Project Co shall also provide suitably robust signage for easy site navigation during construction and operational phases.

# 7.5 Roads, Footpaths, Cycleways & Car Parking

Project Co shall ensure the following as a minimum:

- a) Parking for vehicles is to be as close as possible to relevant parts of the Facilities served and the diminishing of the visual impact of parking by appropriate planting shall not impinge on individual parking places;
- b) Direct routes from parking areas to the building entrances are provided; and
- c) Appropriate and secure cycle storage.

Project Co shall provide as a minimum a network of private roadways on the Site and at the Campus Site providing access to:

- a) Car parking;
- b) The delivery entrance(s) to the Facilities, waste compounds and service infrastructure;
- c) A taxi / car / ambulance drop off and layover bay.

Project Co shall ensure that all roads, delivery and refuse collection areas have sufficient headroom above them to allow for the passage of appropriate delivery and refuse collection vehicles and are designed to provide sufficient space to allow efficient manoeuvring of such vehicles without undue difficulty, risk of impact or adverse effect of exhaust fumes on occupants of the buildings. Project Co shall ensure that all roads, car parks and other areas that may be used by fire fighting appliances shall have sufficient headroom for such vehicles equipped with fire fighting appliances and are designed to allow their efficient manoeuvring. Project Co shall submit details of the types of delivery vehicles which require to be considered in the design to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Where areas of car parks are required to be traversed by vehicles heavier than 2500kg for maintenance or access purposes, the sub-base, base and surfacing of these areas shall be specifically designed by Project Co for these heavier loads.

Roads, delivery and refuse collection areas, and car parks, together with their supporting groundworks and structures, shall be designed by Project Co to provide full and sufficient access for inspection, maintenance and repair of roads, car parks, delivery and refuse collection areas, structures, underground and underground drainage and sewerage, including existing drainage items such as manhole covers and drains and sewers. Where access for maintenance, repair or replacement of underground services is required under the terms of an easement, the design of all elements affecting the exercise of such an easement or servitude shall also be in accordance with the requirements of the party that has the right to exercise the servitude or easement. See also drainage requirements detailed at paragraphs 4, 6.1.1, 6.11, 8.7.20 and 10.3 of this Sub-Section C.

Project Co shall also comply with the following criteria:

- a) Finish: to be macadam, hot rolled asphalt or, if approved by the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, block paving. Project Co shall provide a black finish to roads, green finish to cycle routes and a red finish to pedestrian routes (subject to agreement with The City of Edinburgh Council);
- b) Kerbs: to comply as a minimum standard with BS.1339:2003 "Concrete paving flags Requirements and test methods". Dropped, flush, kerbs shall be provided at all pedestrian crossing locations;
- c) Pedestrian crossings: details of types, locations, lighting and controls shall be Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement;

- d) Markings: to The Traffic Signs Regulations and General Directions 2002 and all Chapters of The Traffic Signs Manual and details of such shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement;
- e) Gradients: All gradients shall comply with the provisions of The Building (Scotland) Regulations 2004 and its amendments as applicable. No gradient in excess of 1:20 shall be allowed in parking areas (other than access roadways), and 1:15 on pedestrian staff, patient and visitor access paths from parking areas to the building entrances; and
- f) Parking bays: comply with the SHFN 20, HFN 21 and the item on gradients above. Variation from the standard (to make optimum use of the space for example) may be desirable and Project Co shall submit details to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Designs shall cater for the access and parking needs of pedestrians and the physically disadvantaged. This shall involve catering for visitors and staff using different modes of transport in adapted vehicles and with multiple aids / equipment.

Accessible parking bays shall incorporate a minimum additional 1.2m section to the end of each bay. This is to allow tailgate access by disabled people without the need to set down ramps or lifts within the main circulation routes of car parks. The first and last accessible parking bays in a row of 'in line' spaces shall be provided with a minimum clear area of 1.2m to both sides.

Parking for the transport requirements of deliveries and waste disposal, ambulances, fire appliances and other specialist and emergency vehicles shall be segregated from public and staff parking.

Car parking provision shall take into account the following requirements:

- a) Drop off points;
- b) Dedicated parking for those with disabilities, the elderly and those with small children located close to the clinical areas, especially for those with limited mobility and eyesight;
- c) Automated controlled entry / egress barrier arms to service vehicles access defined in paragraph 3.8.6 of this Sub-Section C, emergency department parking defined in paragraph 3.9.2 of this Sub-Section C, RHSC Disabled Parent and Child Parking and DCN Disabled Parking defined in paragraph 3.9.3 of this Sub-Section C shall be installed by Project Co. Care shall be taken that the location and design of the control mechanism has sufficient capacity to cope with peak flows and that there shall be clearly defined instructions. The controlled barrier to the proximity parking shall be provided with a height gauge to prevent unwanted high-sided vehicles from entering and shall be well lit at all times;
- d) Appropriate parking for on-call clinical night staff as near as practical to the controlled night entrance(s) for staff; and
- e) Project Co shall design and provide appropriate signage external to the Facilities to ensure ease of navigation around the Site.

# 7.6 Hard Landscaping Requirements

Project Co shall incorporate into the Facilities all associated hard landscaping for the Site, including but not limited to the following;

- a) Access and hardstanding for emergency and delivery vehicles;
- b) Access for building maintenance and window cleaning;
- c) Access and circulation for, visitors and patients both on foot, bicycles, in cars or on public transport;
- d) Parking for vehicles and bicycles including disabled facilities;
- e) Drop-off facilities including lay-bys and bus/transport stops;
- f) Service areas, as appropriate;
- g) Accommodation for building services plant, waste and materials management, as appropriate;
- h) Amenity areas for staff, patients and visitors;
- i) Suitable pathways and paving;
- j) Protection against noise and environmental pollution;
- k) Security provisions, as appropriate;
- I) Appropriate Site boundary treatment;
- m) Walls, fencing, gates / barriers and hedgerows as appropriate along the Site Boundary and at particular locations inside the Site;
- n) CCTV surveillance of the building perimeter, to all car parks, pedestrian routes, therapy gardens, courtyards, roof terraces, external play areas and helipad;
- o) External lighting;
- p) Suitable means of shelter against adverse weather conditions at entrances, bus / transport waiting, and drop off locations and covered links provided, as appropriate;
- q) Automatic vehicle access barriers, as appropriate; and
- r) Fire hydrants.

All hardstanding, Site roads, paths, car parks, cycleways, and footpaths etc shall be designed and constructed so as to be free from standing water within the design criteria of the relevant authority.

# 8 Mechanical & Electrical Engineering Requirements

Project Co shall provide the Works to comply with the Environmental Matrix.

Project Co shall in carrying out the Works comply with the following non-exhaustive list of mechanical & electrical requirements.

Project Co shall provide mechanical and electrical systems that help create a "state-of-the-art" building with innovative design. Project Co shall provide an engineering system that utilises the latest technology to create a high quality working environment that will provide a reassuring, enjoyable and convenient hospital for all patients, their families, visitors and staff. Project Co shall ensure the services network is efficient, effective, flexible and unobtrusive.

Project Co shall ensure that the system is easy to maintain and shall maximise the opportunities for flexible adaptation and extension of the Facilities.

Electrical, mechanical and communication services shall be designed to be an integral and coordinated part of the design. Services shall be clearly identified at regular intervals and at all locations where maintenance access is required.

The location of engineering and utility services shall be co-ordinated with the structure and not constrain or conflict with Operational Functionality. Access to all services shall facilitate ease of maintenance which shall be safe and able to be effectively undertaken. There shall be provision for space to give flexibility for future re-planning and / or re-modelling of the Facilities.

The Board requires the buildings to be designed to achieve an optimum level of autonomy along with energy and utility utilisation. The energy centre shall be for the sole use of the Facilities. The services provided from the energy centre shall be provided from sources solely on the Site.

Project Co shall take cognisance of all the building services implications of the requirements described in the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

For the avoidance of doubt the hierarchy of standards and advice detailed in paragraph 2.5 shall apply to this paragraph 8.

### 8.1 Minimum Engineering Standards

In addition to the publications in paragraph 2 of this Sub-Section C Project Wide Requirement, Project Co shall ensure that the design, construction and selection of components for the mechanical and electrical works comply with, including but not limited to, the following design reference documents:

- a) NHS Scotland Firecode;
- b) All current relevant legislation and Codes of Practice by CIBSE;
- c) All current relevant legislation by HVAC;
- d) All current relevant British Standards;
- e) European Harmonised Standard Specifications and Codes of Practice;
- f) ACS Accreditation (formerly CORGI Regulations);
- g) Gas Safety Regulations;
- h) The Management, Design and Operation of Microbiological Containment laboratories. HSE 2001
- i) Biological Agents: Managing the Risks in Laboratories and Health Care Premises HSE 2005
- j) Biological Agents: The Principles, Design and Operation of Containment Level 4 Facilities.
- k) Water Research Centre Codes;
- 1) The Water Supply (Water Quality) (Scotland) Regulations 2010;
- m) Electricity at Work Regulations1989;
- n) BS 7671:2008) (IEE Wiring Regulations);

- The control of legionella bacteria in water systems approved Code of Practice;
- p) The Electrical Equipment (Safety) Regulations 1994; and
- q) Electromagnetic Compatibility Regulations 2006.

The design of the environmental control system shall be co-ordinated and integrated with the design of the structure and the occupied areas as to maximise the control and flexibility of the Facilities.

The following is a non exhaustive list of SHTM's, HBN's and HTM's applicable to the Facilities:

- a) SHTM 64: Building Components Series Sanitary Assemblies:
- b) SHTM 2010 Parts 1 6: Sterilization;
- c) SHTM 2023: Access and accommodation for engineering services;
- d) SHTM 2030: Washer-disinfectors
- e) SHTM 2031: Clean steam for sterilization
- f) SHTM 2035: Mains signalling;
- g) SHTM 02-01 Parts A and B: Medical gas pipeline systems
- h) SHTM 03-01: Ventilation in Healthcare Premises;
- i) SHTM 04-01 Parts A G: The control of Legionella, hygiene, 'safe' hot water, cold water and drinking water systems;
- j) SHTM 06-01: Electrical services supply and distribution;
- k) SHTM 06-02: Electrical safety guidance for low voltage systems;
- I) SHTM 06-03: Electrical safety guidance for high voltage systems;
- m) SHTM 08-01: Specialist Services Acoustics;
- n) SHTM 08-02: Specialist Services Lifts;
- o) SHTM 08-03: Specialist Services Bedhead Services;
- p) SHTM 08-04: Pneumatic Tube Transport Systems;
- q) SHTM 08-05: Parts A to D: Building Management Systems;
- r) SHTM 08-06: Specialist Services Pathology Laboratory Gas Systems;
- s) HBN 00-07: Resilience Planning for Healthcare Establishments;
- t) HTM 07-02: EnCO2de; and
- u) HTM 07-03: Transport Management and Car Parking.

Project Co shall consider the requirement for ligature resistance fittings and fixings within the building services provision in appropriate areas (identified or otherwise in the Specific Clinical and Non-Clinical Requirements), and generally in keeping with Good Industry Practice.

#### 8.2 Infection Control

Mechanical and Electrical equipment selections and designs shall take cognisance of HAI-SCRIBE in its entirety.

# 8.3 Engineering Services Interface with Building Fabric

Project Co shall ensure that co-ordination of the electrical, mechanical and communication services shall form an inherent part of the Facilities design.

Services provision, e.g. luminaires, fire alarms, and mechanical services, shall be co-ordinated with the ceiling layout and allow simple relocation if required.

Access to services shall be provided and the services clearly identified at regular intervals and at all locations where maintenance access is required, for example at valves and electricity connection points. Access to building services shall be in accordance with SHTM 2023: Access and accommodation for engineering services.

The positioning of sockets, light switches, alarm buttons and fire "break-glass" panels etc shall be consistently located throughout the Facilities and to specifications set out in BS8300 (unless specific clinical needs take precedence). The positions shall be detailed and shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Structural design shall ensure that structures are co-ordinated to ensure the logical and sequential installation and maintenance of services. For example the use of columns adjacent to vertical service voids shall be minimised.

### 8.4 Unrestricted Access to Patients

Project Co shall take due consideration of the servicing strategy for highly serviced areas. This shall be inclusive of but not limited to bed areas where clinical staff require 360° free access. Project Co shall not gain access to services above beds for maintenance purposes

#### 8.5 Performance Standards

# **8.5.1 Energy Performance Certificate**

Project Co shall ensure that the Facilities shall operate to achieve an Energy Performance Certificate (EPC) rating of C or better.

Project Co shall provide and display the Energy Performance Certificate (EPC) for each building in the Facilities.

#### 8.5.2 Thermal Comfort

Where maximum internal summer time temperature calculations indicate that the internal temperature will exceed those limits set out in the Environmental Matrix, Project Co shall provide means of reducing the temperature rise.

Measures shall be assessed, modelled and implemented to demonstrate that the internal air temperature of any room or area does not exceed the maximum acceptable level of 25°C for more than 50 hours per annum.

For any room or area that does not meet this criterion, there should be a hierarchy of remedial action to prevent the high temperature by passive means as a priority, adopting a suitable means of comfort cooling as a last resort.

### 8.5.3 Air Quality

#### i. Internal

Air quality in all areas shall take account of occupancy levels, internal pollutants, heat gains, external pollutants and atmospheric conditions and shall be controlled to provide adequate comfort and fresh air levels appropriate to the functions of each department area.

Particular attention shall be given to the risk of cross infection within the hospital / healthcare environment and shall be such as to minimise the spread of infection. Project Co shall demonstrate through submission of information to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, how the proposals facilitate the control and management of an outbreak and spread of infectious diseases, and in particular shall comply with the requirements of SHTM 03-01 (Ventilation in Healthcare Premises). In order to reduce cross-contamination, the design of the Facilities shall incorporate 100% fresh air supply systems only.

Project Co's demonstration referred to above is to cover all aspects of the building, its services, spatial relationships, soft and hard FM proposals and incorporate requirements of the Board's Infection Control Team.

Project Co shall provide natural ventilation wherever possible, except where:

- a) The level of outside noise is unacceptable;
- b) Safety or security features must be provided;
- c) Unpleasant smells are generated either inside or outside the building;
- d) Where inflows of air are undesirable;
- e) Clinical requirements, as detailed in the Room Data Sheets, do not allow in areas such as isolation rooms, where positive or negative pressure are required; and
- f) Areas which are air-conditioned.

#### ii. External

a) The Project Co shall comply with the requirements of City of Edinburgh Council and other statutory bodies regarding airborne emissions from the Site and shall undertake all studies necessary to prove that emissions and their dispersal will not have any adverse impact on the local community or staff, patients and visitors to the Campus Site.

#### 8.5.4 Vibration

Project Co shall ensure that building services plant and equipment are suitably isolated from the building structure in order to prevent the transmission of vibration. Project Co shall comply with the guidance on the satisfactory magnitude of building vibration with respect to human response given in BS 6472-1:2008 Guide to evaluation of human exposure to vibration in buildings Part 1 Vibration sources other than blasting. Project Co shall comply with the following vibration limits detailed below:

- a) Plant rooms on occupied floors 0.015 m/s<sup>2</sup>;
- b) Plant rooms above and below occupied floor levels 0.050 m/s<sup>2</sup>;
- c) Remote plant rooms 0.100 m/s<sup>2</sup>;
- d) No structure borne vibration is perceptible within any nearby living apartment.

#### 8.5.5 Acoustics

To allow the effective control of building services noise in the provision of a satisfactory acoustic environment Project Co shall satisfy the following criteria (with reference to British Standards and NHS Requirements in particular SHTM 08-01 Acoustics.

- a) Careful selection of plant and equipment;
- b) Good installation;
- c) Correct operation and maintenance;
- d) Be such that any associated noise complies with NR25 when measured within any nearby living apartment.

# 8.6 Incoming Services

# 8.6.1 General

Project Co shall be responsible for the provision of all new utilities and the energy supply infrastructure to and from the Facilities (whether this is internal or external to the Site boundary), including:

- a) Confirmation of the capacity of the proposed system;
- b) Liaison with potential suppliers;
- c) System development and planning;

- d) Any supplies modifications to the periphery of the Site;
- e) Any supplies modifications within the Site;
- f) Metering and sub-metering of supplies;
- g) Strategic planning;
- h) Emergency systems; and
- i) Power factor correction.

Project Co shall carry out the work outwith the Site boundary in accordance with the relevant provisions of paragraph 4.

## 8.6.2 Security of Incoming Supplies

Project Co shall provide back up to respond to the failure of the incoming supply of electricity, gas and water supplies to the Facilities.

In particular, Project Co shall provide 100% standby generator capacity for electrical services in accordance with the requirements and recommendations of SHTM 06-01. For the avoidance of doubt, Project Co shall also ensure that the Facilities are provided such that all the requirements detailed in SHTM 06-01 are satisfied.

Project Co shall ensure that energy, water, power supplies, medical gases and communication supplies to and within the Facilities are maintained by agreement with the utility suppliers, the Board, and where necessary by providing standby sources of supply (e.g. dual fuel boilers etc).

Project Co shall develop a strategy to ensure the security of the supply. Project Co shall be required to demonstrate the feasibility of the strategy to the satisfaction of the Board.

Project Co shall investigate adequacy, and provide the Board a report on location and number of connections of local town's water supply, gas and electrical supplies around and to the Site. Project Co shall ensure their town's water, gas, electrical and data/telecommunication connections to the Site maintains an adequate, autonomous and robust service and shall submit full connection details with the proposals.

The incoming gas supply shall be housed in a stand alone gas meter house of adequate size to accommodate the gas supply with gas meter, twin governor gas streams with associated valves and where each stream is sized to meet full Facilities capacity.

## 8.6.3 Provision for Isolation

Project Co shall ensure that all sections of the supply mains, whether supplying electricity, gas or fluids, can be taken out of service for maintenance without interrupting the supply to the Facilities or to any part of the Retained Estate and/or Retained Site.

Project Co shall provide external isolation of water supplies to the new Facilities. Local isolation of the water supply to all sanitary appliances, and at the final equipment connection points, shall also be provided.

# 8.7 Mechanical Systems

The Project Co shall design, supply, install, test, commission, operate and maintain all mechanical building services necessary to support the Clinical Services at the Facilities. The following systems are indicative of those anticipated by the Board but are not exhaustive and sole responsibility shall be Project Co's to determine all necessary systems are included.

Systems shall be design, supplied, installed, tested, commissioned, operated and maintained all in accordance with the regulations and standards.

# 8.7.1 Building Management Systems & Controls

Project Co shall provide a building management system (BMS) to be installed to allow easy, remote, monitoring of measured values and control set points. Communication with (and between controllers) will utilise the main hospital data network and therefore the data traffic between controllers and dependency on the network shall be minimised. There will not be a requirement for CCTV video or sound files to be transferred, via the network, and therefore it is not envisaged that a high data bandwidth will be needed. All BMS systems generally have the same functionality and therefore the choice of manufacturer shall be the responsibility of Project Co, but consideration should be given to existing systems that are currently on the network which are "Sigma" from Schneider Electric or "Desigo" from Siemens.

Should multiple BMS systems/suppliers be used Project Co shall require to fully integrate these into a single 'master' BMS system and to provide training to the Board in the areas required for 'read only' access.

Project Co shall ensure all plant can be operated in automatic mode (via a BMS) or manual mode should a corruption in BMS software occur. Furthermore, physical bypasses shall be provided where appropriate for maintaining service, for example at control valves.

Project Co shall install a new digital BMS that controls all mechanical systems. The BMS should not be considered as a "life & limb system" and should only control the mechanical systems but should interface to the other systems such as lighting. Monitoring of security, CCTV, lifts etc will only be of an information type and BMS will not be relied upon to deliver "life alarms". Also, future replacements of systems should be considered at this point and one system should not control everything. Systems do become obsolete (and manufacturers fail) and if one system were to be used for "everything" then all the system could be compromised and need changing at the same time. This would be a very costly exercise with multiple complications. If "interfaces" were to be used between separate systems the problem of catastrophic failure is avoided with only one system compromised making it easier to manage during restoration of services.

It shall assist in minimising energy consumption. Project Co shall ensure that the Facilities have a hard-wired link between the BMS and fire alarm and other life safety systems to enable plant shutdown if required during fire situations as well as complying with the relevant provisions of paragraph 3 and 4 as regards fire, security, and CCTV. Project Co shall ensure that the BMS is capable of producing energy consumption reports to the Board's requirements. The Board shall have full access to all new graphics which shall be fully visible to the Board with 'read only' rights to the BMS. The BMS front-end shall be internet enabled to allow secure access from any internet based PC without the need for further licences.

Project Co only shall have control and adjustment of BMS settings.

The BMS system shall be designed, installed and commissioned in accordance with the manufacturers' instructions and industry best practise. The following documents shall also be taken into consideration:

- a) Standard Specifications for BMS, AG 9/2001, BSRIA;
- b) Library of system control strategies, AG 7/98, BSRIA;
- c) Automatic control, CIBSE Commissioning Code C: 2001;
- d) Specifying building management systems, TN 6/98, BSRIA; and
- e) SHTM 08-05.

The Board controls philosophy is to provide a safe, healthy and comfortable environmental condition in the Facilities, whilst focusing on energy conservation measures. Project Co shall ensure that the controls effectively deliver the requirements of the Board. Project Co shall adopt Good Industry Practice in the application of BMS controls.

Project Co shall ensure that an energy and life cycle cost conscious approach is adopted for all stages of the BMS. Project Co shall ensure that this includes the initial design of a system through to final commissioning; the planned maintenance; and the servicing of the plant.

Project Co shall ensure that the programming of the outstations shall be carried out in a consistent, structured manner. Project Co shall ensure that strategies shall be kept as simple and as uniform as possible. Project Co shall ensure that the BMS incorporates the following non-exhaustive list of full functionality and monitoring points;

- a) The control and timing of heating, cooling and ventilation plant to ensure optimum energy and environmental performance, including multiple temperature zone controls, zone valves and individual area and room temperature sensors.
- b) Optimum start of heating, cooling and ventilation plant to minimise the operational costs of achieving desired values by occupation time.
- c) Optimum stop of heating, cooling and ventilation plant to minimise the operational costs of running plant during the required occupancy period.
- d) Facility to program night set back set points for individual areas, individual optimisers, individual time schedules and areas that require heating continuously but not consistently.
- e) Protection for the mechanical plant and building fabric during external frost conditions.
- f) Protection for the building fabric, from condensation, when the mechanical plant is timed off.
- g) Protection for the mechanical plant and building fabric during severe external air low temperatures.
- h) Provision to automatically shut off heating plant when the external air temperature has risen above a pre-determined set value. The plant will automatically restore normal operation when the external air temperature falls to below a separate pre-determined value.
- i) Weather compensation of any heating circuit dependant on external air temperature. This compensated set value will be accessible for easy adjustment.

- j) Weather compensated heating circuits will also have room temperature influence to raise (and lower) the calculated set point with reference to a room temperature set point.
- k) Where dual plant has been installed this shall be able to be automatically duty cycled by the BMS on a weekly or hours-run basis. Failure of the duty plant shall notify the system and automatically (after a short period of time) bring on the standby plant.
- I) All ventilation plant and air handling units shall be individually monitored and controlled through the BMS.
- m) All extract fans shall be individually timeclock controlled and monitored through the BMS.
- n) Representative graphic slides will be required for all the controlled plant on the system. A hierarchical structure shall be adopted that allows other relative slides to be directly accessed from the current slide. These slides shall match the standard slides for the respective existing systems details of which shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.
- o) The system shall automatically flag-up alarms for remote interrogation. Essential critical alarms shall be also routed via SMS texts to an out-of-hours "on call" mobile phone. Great care shall be given to selection of the alarms that are deemed to be essential critical alarms.
- p) The current state of plant, temperatures, set-values etc shall be accessible from a simple, intuitive index tree structure on the BMS "front-end" interface.
- q) Application of energy metering, via the BMS, will allow Renewable Heat Incentive and energy saving schemes and to be implemented. This will require heat meters to be installed on each plate heat exchanger and heating circuit and connected into the BMS via MODBUS type interface. These meters may be used for fiscal purposes and would assist in providing information as to energy use.
- r) The BMS shall monitor but not control the fire alarm system. The fire alarm system shall be hard-wired to the heating/ventilation plant to switch the plant off when required. The BMS input from the fire alarm system would mirror the action of the fire alarm hard-wired connection to also switch the plant off to prevent nuisance alarms from being generated.
- s) The BMS shall monitor the control circuit state within each control panel and on failure of the control circuit would switch off the demands for the connected plant. This will assist in identifying the control circuit state and also in preventing the system from being swamped by nuisance alarms. Care shall be taken that the control circuit failure does not give the impression that a fire alarm event has happened.
- t) The automatic start-up of plant (timed on, restoration of fire alarm or control circuit) will be staged in over a period of a few minutes to prevent surges on the supply to the control panels.
- u) The BMS will status monitor other systems such as medical gas alarm, fire alarm fault, security system fault, lift motor fault etc but will NOT be expected to carry out any function with this information. All the systems connected will have their own strategy that will not be affected by the operation of the BMS.
- v) The BMS will monitor common fault alarms for security, smoke dampers, CCTV, staff attack, disabled alarms and nurse call.
- w) Local independent cooling systems serving IT rooms will be controlled by their own control system to the dictates of their own, independent, temperature control sensor. The BMS will have a dedicated sensor located beside the control sensor for monitoring

- purposes only. Information from the cooling system such as "Running" and "Failure" will be connected into the BMS.
- x) Boilers and Chillers independent control systems will have electronic interfaces to connect to the respective BMS. This is envisaged to be a MODBUS connection that will allow operational data such as temperatures, conditions, set values, run-times and alarms to be "mapped" onto the BMS as real values.
- y) Fans and pumps will be inverter driven and speed set via an analogue output from the BMS. This will allow trim to be applied to reduce operational costs as and when possible. Independent pump (and fan) speed control should be avoided as remote speed control, by BMS, is unlikely to be achievable.
- z) Information from inverter drives used for fans and pumps such as running state and trip state will be echoed back to the BMS via connections internal to the respective control panels. These signals will also illuminate indicators on the control panel facia.
- aa) Piped across pumps and fans will be differential pressure switches that will provide indications of actual running condition of the plant. These conditions will be echoed back to the BMS via connections internal to the respective control panels. These signals will also illuminate indicators on the control panel facia.
- bb) The BMS will be programmed with settable operational user levels to allow the filtering of functionality to be determined dependant on users experience and training.
- cc) Where local room temperature controllers are utilised they shall be integrated with the BMS to allow the BMS to monitor the current characteristics of the controller. Characteristics such as current room temperature, actual room set-point, controller state, valve positions etc. It should also be possible to set values into the controllers remotely from the BMS. Examples of the set values are: Enabling the controller, main set values, lower set point limit, upper set point limit. Every room controller will be represented individually on the BMS to allow specific rooms default conditions to be set remotely. The BMS software shall be written to allow for night set-back room temperature set points to be applied if required.
- dd) Electricity metering shall be provided on specific distribution boards and connected into the BMS via MODBUS type interface.
- ee) All renewable/LZC technology systems shall be individually metered and connected into the BMS via MODBUS type interface to permit the Board to monitor record and maximise financial benefits from each system.
- ff) The BMS shall be capable of monitoring the hot and cold water temperatures, including stored cold water and volume records.
- gg) The BMS shall be capable of monitoring the UPS/Emergency generators.
- hh) The BMS shall be capable of remote monitoring of all critical fridge/freezers.

For clarity "multiple temperature zone controls" throughout this BMS section refers to BMS connected equipment to allow for zoning throughout the building to ensure that each department and on a floor-by-floor basis can be time controlled via the BMS to allow for current (and future) changes to departmental occupational / heating requirements.

The BMS will include all the required control equipment (Fan / pump starters, sensors, valve actuators, pressure switches, pressure transducers, relays, power wiring, control wiring, network wiring, hand over-ride switches, panel indicator lamps, all other associated control panel items, site specific software including graphic slides) to provide a complete working system control system.

Project Co shall ensure the BMS is set up in a way that enables the monitoring of points on a continuous basis by the Board in order to facilitate trend analysis. Project Co shall ensure that this includes temperature profiles, valve positions and plant operation periods. Project Co shall ensure that it is possible to obtain historic data on specified points for a period of at least 14 days in order to facilitate fault diagnosis in the event of a problem.

Project Co shall ensure that the monitoring of domestic hot water and cold water (including tanks and end-of-line outlets) is continuous and carried out throughout the Facilities (not just at central plant) in order to demonstrate compliance with the Board's Legionella prevention strategy and conforms to relevant legislation, and NHS guidance.

Project Co shall ensure that the BMS is installed to control all plant where there is an operational requirement or a life cycle cost benefit, including but not limited to:

- a) Boiler plant;
- b) Air handling plant;
- c) Ventilation plant;
- d) Cooling plant;
- e) Domestic hot water plant;
- f) Duty/Standby control; and
- g) Lighting interior and exterior (localised control shall also be considered).

Project Co shall ensure that all major plant items shall be designed and controlled to provide "real time" status monitoring, including run, fault, and alarm reporting. Project Co shall ensure that this includes boilers, pumps, pressurisation units, air handling plant, fans and air conditioning. Project Co shall provide a modular boiler system for the Facilities which will be of a dual fuel nature with storage capacity to meet the Board's statutory civil contingency requirements, which is 200 hours of peak winter demand.

Project Co shall ensure that the requirements of the following paragraphs are incorporated into the proposed Building Management System for the Facilities;

### i. Zone Control

Project Co shall ensure the Facilities are capable of individual temperature control for all patient areas; to be achieved with the use of BMS controlled zone controls. Areas of 24-hour operation shall be independently controlled from non 24 hour areas to ensure optimum efficiency and in discrete areas consideration shall be given to localised zoning depending on the orientation of the buildings. Proper consideration is required to the level and extent of temperature sensing and monitoring devices to provide both accurate and cost effective zonal control.

# ii. Optimisation & Compensation

Project Co shall ensure Good Industry Practice is adhered to regarding control regimes incorporating time, optimisation and weather compensation.

# iii. Smart Metering

Project Co shall ensure the use of meters giving high accuracy at low flow rates and that metering points give consumption in SI units including any time bands as appropriate. Project Co shall ensure data collection and report production is by electronic systems.

Project Co shall allow sub-metering of electricity, heating and domestic water usage for each individual department / unit.

Project Co shall allow sub-metering of electricity usage for each individual department / unit and as required to satisfy the requirements of Section 6 of the Scottish Technical Standards.

As a minimum all incoming utilities shall be metered. In addition, any relatively large use of electricity, such as DHW trace heating, external lighting or mechanical plant, shall be metered separately and in line with BREEAM Healthcare stipulations.

The metering equipment shall be located at the most appropriate location for easy manual accurate reading to be taken of the load and reading should also be relayed to a central meter station in the energy centre.

Project Co shall make provision to allow the regular monitoring and reporting procedures to be implemented during the Operational Term. The installation of sub-metering is required and is to be introduced to allow accurate departmental energy usage and costing information to be obtained.

The Board believes that the feedback of information on consumption levels is essential to ensure that any adverse variances are recognised and a course of remedial action initiated. The system shall be designed and installed so that monitoring can be carried out on a continuous basis to enable energy consumptions to be data logged and profiled.

The system shall be designed and installed to permit calibration/accuracy checks on all meters (primary and sub) on an ongoing basis as an integral part of the services commissioning and prior to project completion to ensure BMS accuracy.

The BMS shall be installed to automatically read and provide trend analysis to a range of energy / water meters. All meters including those of the utility supply companies and internal sub-meters shall be automatically read by the BMS at pre-determined intervals. Project Co shall ensure that the BMS is capable of reading utility meters on a continuous basis in order to facilitate trend analysis. The energy metering shall include (but not limited to):

# Electricity

- a) Main incoming HV supply;
- b) Main LV Switchboard;
- c) External lighting (separate sub-meter for car park lighting);
- d) All distribution boards with separate meters for power and lighting;
- e) Departmental power and lighting;
- f) HVAC control panels;
- g) Cooling plant;

- h) Standby electrical energy sources, rotating and static; and
- i) Tenant areas (if provided).

For the purpose of energy estimates, hours run meters shall be provided for all Air Handling Unit (AHU) fans.

#### Water

- a) Main incoming water supply; and
- b) Internal sub-meters.

#### Gas

- a) Main incoming gas supply; and
- b) Internal sub-meters.

Oil

- a) Delivered to Site; and
- b) Used on Site, by individual pieces of equipment.

# iv. Smart Meter Type

The new smart meters must be capable to 'store measured energy consumption data for multiple time periods; and at least half hourly' and they must 'provide remote access to such data by the licensee'. The meter shall allow access to data to be available in a day + one.

The metering shall be provided by an independent provider of metering and data services. This will allow the supplier to be changed without being bound by any metering and data services, and without losing meter data during the supplier change over.

#### v. Communication Protocol

In recognition of the advances being made in building management systems, Project Co shall ensure that the BMS platform is compatible with a range of diversified core systems and standard protocols such as BACnet, LonTalk, Modbus, and OPC. The use of these standard communication protocols will allow for more effective integration and help prepare for future devices and technologies. It will also facilitate the use of communication between different manufacturers control equipment.

# vi. User Interface

Project Co shall ensure that once installed and commissioned the 'smart' meters have a BMS user interface that is sufficiently user friendly to facilitate multi-user access, without the need for the users to be controls or software specialists. Project Co shall meet the requirements of the Board in so far as that; the Board envisages that navigation around the BMS, via the "front end" will be by a combination of floor plans, plant & equipment graphics and drop down menus or "software" knobs.

Project Co shall provide the Board with a system capable of remote off-site access through the BMS from a number of locations, in order that it can monitor internal and utility consumptions / trends. Software access to be security password controlled.

Project Co to prepare and present sample software tutorial on BMS graphics (Graphical User Interface) to the Board/end user as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement at a time suitably in advance of project completion to allow software/graphic modifications in line with the Board comments.

# vii. System Selection

Project Co shall ensure that all materials and equipment used are standard components, regularly manufactured for this and/or other systems and not custom designed especially for this project. Project Co shall ensure that all systems and components have been thoroughly tested and proven in actual use, for at least two years, within other NHS establishments of a similar size and complexity to this one. All components and/or systems shall be type tested and carry the CE mark.

Project Co shall confirm that both the hardware and software will be fully supported for a minimum period of 15 years from the Actual Completion Date. Future compatibility shall be supported for no less than 10 years from the Actual Completion Date. Compatibility shall be defined as the ability to upgrade existing field panels to current level of technology, and extend new field panels on a previously installed network.

#### 8.7.2 Towns Water Connection to the Site

Project Co shall provide a secure as possible single towns water connection to the Site from the local Scottish Water network exploring opportunities for and if feasible incorporate dual supplies to ensure increased site resilience and subject to complying with the relevant provisions of paragraph 4.

### 8.7.3 Site Mains Water, Fire Water, Quality & Distribution

Project Co shall develop the Site potable and fire water networks as separate systems, each arranged in a ring with adequate valving to achieve robustness in continuity of supply.

Project Co shall filter the Site potable water to the criteria set out in SHTM 04-01 Parts A - G and commensurate with the piping material proposed.

In determining the pipework material the Project Co shall take cognisance of the latest best practice in the Scottish NHS.

#### 8.7.4 Fossil Fuels

Project Co shall be responsible, in conjunction with Transco in determining the philosophy for the provision of fossil fuels to the Site. Options that Project Co may consider are uninterruptible gas or the provision of dual fuel burners and a heating oil standby facility. Irrespective of the option proposed by Project Co the availability criteria described elsewhere in Clause 9 and Schedule Part 14 (Payment Mechanism) of the Project Agreement and/or the Services Specifications will be strictly adhered to.

# 8.7.5 Heating System

Project Co shall provide all heating systems required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and to:

- a) Zone and control heating circuits to provide an efficient and comfortable environment;
- b) Provide valve isolation such that isolation of circuits/sub-circuits shall have minimal disruption to the remaining departments;
- c) Provide 24 hour occupied (and unoccupied) wards and departments with a night set-back facility;
- d) Provide temperature and ventilation night set-back facilities so that when departments are unoccupied they will have frost and anti-condensation protection.

Project Co shall provide high efficiency, low NOx heat generation and heating water distribution plant, serving good quality heat emitters to ensure satisfactory heat distribution within the area served. Project Co shall arrange heat emitters and all heating pipework such that in all areas, the surface temperature limits as laid down in SHTM 04-01 Parts A - G are not exceeded. Project Co shall not utilise heating pipework as a heat emitter within patient areas.

Project Co shall pay particular attention to effective use of warm air curtains in entrance / draft lobbies.

### 8.7.6 Domestic Water Services

The water supply system for the Facilities shall include a new dedicated supply from Scottish Water's off site infrastructure and also incorporate on-site bulk water storage (24-hours) and subject to complying with the relevant provisions of paragraph 4.

Treatment of potable cold water supplies is considered undesirable and the provision of a wholesome supply from Scottish Water's mains with the minimum of storage and handling is the preferred approach.

Project Co shall design and install the domestic cold and hot water supply installations to fully comply with the requirements of SHTM 04-01 Parts A - G. Project Co shall include for all specialist treatment plant that may be necessary. Project Co shall provide water sampling points as required by SHTM 04-01 Parts A - G with due regard for clinical requirements and provision of Clinical Services.

Secure local isolation shall be provided by Project Co at all sanitary appliances, and at final connection points to equipment. Project Co shall provide secure external isolation to the buildings.

Project Co shall provide plumbed in water dispensers at ward level in accordance with Schedule Part 11, Equipment Schedule. The installation of ice machines is prohibited.

Project Co shall provide plumbed water to specialist services such as, but not limited to, washing machines in specialised units and dishwashers in ward areas in accordance with the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements), and in particular Schedule Part 11, Equipment Schedule.

Project Co shall provide plumbed water to all vending machines as required throughout the Facilities in accordance with the Board's Construction Requirements Part 6 Section 3 Sub-

Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements), and in particular the Schedule Part 11, Equipment Schedule.

The Project Co's attention is drawn in particular to SHTM 04-01 Parts A - G concerning pipework materials and standards of filtration to be used in Scottish health care facilities.

All clinical hand washing facilities shall be provided with automatic sensor taps. In order to assist in achieving the water consumption target (see paragraph 5.26 of this Sub-Section C) Project Co shall consider the use of low flush toilets and insert spray caps where appropriate to taps to ensure the conservation of the water supply. Project Co shall install systems into the urinal facilities to reduce the flush requirements.

As required within SHTM 04-01 Parts A - G, no flexible or braided hoses shall be permitted for final connections between domestic water distribution pipework and appliances/outlets.

Project Co shall consider the environmental benefits and economic viability of greywater recycling on Site and if beneficial to the project shall incorporate such a system into the building services and flood abatement philosophy for the Site. Project Co shall describe fully its mode of operation and integration into the Site.

Project Co shall evaluate the benefits and feasibility of rainwater harvesting for process areas only which if adopted, Project Co shall ensure that the rainwater from the roof of the Facilities and hardstandings is collected, stored and re-used for toilet flushing purposes and if appropriate separated to serve supply points for irrigation of the external areas of the proposed Facilities.

Project Co shall ensure that the recycling facility for the separate greywater and rainwater systems allows for appropriate filtration and complies with any flood abatement philosophy for the site.

### 8.7.7 Hot Water Supply

Appropriate operational engineering systems for hot water and steam shall be included in the design of the Facilities.

Domestic hot water systems shall be designed to provide adequate flow to satisfy maximum demand whilst minimising stored hot water and energy consumption. The provision of some storage is desirable to minimise the impact of hot water generation on boiler power.

Project Co shall install Type 3 (in accordance with NHS Model Engineering Specification D08) thermostatic mixing valves at all HWS outlets to comply with SHTMs and SHGNs except where 60°C water is a particular requirement so that the mandatory requirements for the control of Legionella and other bacteria within the system are met.

Energy efficient hot water boilers shall be provided in all staff rest rooms and kitchen areas.

### 8.7.8 Mechanical Ventilation & Air Conditioning

The heating, ventilation and air conditioning systems shall be logically designed to operate efficiently incorporating heat recovery and providing local control where required. Project Co should ensure avoidance of simultaneous heating and cooling, either by the ventilation system itself or between the ventilation system and any other heating and cooling system,

The energy and power systems shall be appropriately designed to provide fully integrated designs in terms of the incorporation of engineering services into the building fabric and external spaces.

The need to maintain comfort conditions in accordance with the Room Data Sheets in all areas but particularly in clinical areas is of paramount importance and Project Co shall develop strategies for achieving these conditions together with minimum energy consumption.

Project Co shall provide natural and mechanical ventilation, comfort cooling, and air conditioning to suit the Facilities and clinical requirements and provision of the Clinical Services. Project Co shall provide a climate control facility in clinical and staff areas which are provided with comfort cooling (if applicable). The use of low carbon solutions is anticipated for such requirements.

Project Co shall provide the air lock to the first floor of the Link Building to the RIE Facilities in accordance with the Interface Output Specification, the Connection Proposal and relevant provisions or Paragraph 4 concerning any connections to the Link Building.

Project Co shall ensure heat gain from all equipment and personnel is allowed for in sizing and selection of the systems.

Project Co shall demonstrate how the proposals facilitate the control and management of an outbreak and spread of infectious diseases in accordance with SHTM 03-01, SHFN 30 and HAI-SCRIBE.

Project Co demonstration is to cover all aspects of the building, its services, spatial relationships, Soft and Hard FM proposals (as appropriate) and incorporate requirements of the Board's Infection Control Team.

Project Co shall ensure that ventilation systems installed in areas classified as hazardous are designed to relevant standards.

Where grilles or diffusers are used within rooms Project Co shall ensure they are:

- a) Arranged to avoid draughts; and
- b) Designed to minimise noise intrusion into the space.

Project Co shall incorporate provision to include humidification to the AHU plant at a future date.

#### 8.7.9 Combined Heat and Power

Project Co shall consider the environmental benefits and economic viability of Combined Heat and Power (CHP) and if beneficial to the project shall incorporate CHP into the building design, avoiding any 'dumping' of heat or export of power off-site. Project Co shall describe fully its mode of operation and integration into the mechanical and electrical services to demonstrate their assessment and viability.

#### 8.7.10 Medical Gases

Project Co shall provide all medical gases required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical

Requirements) and Sub-Section E (Specific-Non Clinical Requirements), such as but not limited to:-

- a) Oxygen Vacuum Insulated Evaporator (VIE) shall be for the sole use of the Facilities. The Oxygen VIE shall be provided from sources solely on the Site.
- b) Nitrogen provided on the Site
- c) Nitrogen oxide provided on the Site;
- d) Medical air 4 bar;
- e) Surgical air 7 bar; and
- f) 50% oxygen / 50% nitrous oxide provided on the Site.

Medical gas bottles, plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

All medical gas installations which serve clinical departments shall be connected to essential electrical supplies.

The status of the central medical gas plant shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS. Each ward and department shall be fitted with a local medical gas alarm panel downstream of each area valve service unit (AVSU). These panels shall also report the alarm to the BMS.

The local medical gas panel in Medical Inpatients shall have the capacity to repeat the local medical gas alarms from MDCU.

Project Co shall install the piped medical gases in accordance with SHTM 02-01 and "Model Engineering Specification C11".

Project Co shall install outlets as defined in this Schedule Part 6 Section 6 (Room Data Sheets).

Project Co shall provide a medical gas distribution system sized to accommodate the demand of the Facilities at the Actual Completion Date and handover, with the capacity to accommodate an increase in demand (flow and consumption) of no less than 25% throughout the Facilities.

Project Co shall ensure that the provision of medical gases to the point of use is continuous. Where Project Co are providing medical gases via cylinders they shall provide manifold systems with automatic change over from duty to standby to no less than two equal banks of cylinders. The capacity of such arrangements should be in line with that outlined within SHTM 02-01 and "Model Engineering Specification C11" along with necessary alarm systems to alert staff as to a fault conditions.

Project Co shall ensure that adequate points of isolation exist to all medical gas systems.

## 8.7.11 Medical & Dental Vacuum

Project Co shall provide medical and dental vacuum systems as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements).

Medical and dental vacuum plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

Installations shall be connected to essential electrical supplies and shall be in compliance with SHTM 02-01.

The status of the central medical and dental vacuum plant shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS.

# 8.7.12 Anaesthetic Gas Scavenging System

Project Co shall provide an active Anaesthetic Gas Scavenging System (AGSS) as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements).

AGSS plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

The installation shall be connected to essential electrical supplies.

The status of the AGSS shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS.

#### 8.7.13 Non-Medical Gases

Project Co shall provide all non-medical gases required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific-Non Clinical Requirements).

Non-medical gases shall be provided as either bottled or piped installations as deemed appropriate.

Gas bottles, plant areas and stores shall be accommodated within suitably designed buildings / rooms / enclosures with good access, natural ventilation and satisfactory noise emissions control.

All critical non-medical gas installations i.e. certain laboratories etc shall be connected to essential electrical supplies.

The status of the central non medical gas plant shall be monitored by an alarm system with a status signal to an alarm panel located in a manned office. The panel shall also report the alarm to the BMS.

Project Co shall install the non medical gases in accordance with SHTM 08-06, SHTM 02-01 and "Model Engineering Specification C11".

Project Co shall install outlets as defined in Schedule Part 11, Equipment Schedule.

Project Co shall provide a non medical gas distribution system sized to accommodate the anticipated demand of the Facilities at the Actual Completion Date having regard to Schedule

Part 11 (Equipment Schedule) and the Room Data Sheets, with the capacity to accommodate an increase in demand (flow and consumption) of no less than 25% throughout the Facilities.

Project Co shall ensure that the provision of non medical gases to the point of use is continuous. Where Project Co are providing non medical gases via cylinders they shall provide manifold systems with automatic change over from duty to standby to no less than two equal banks of cylinders.

Project Co shall ensure that adequate points of isolation exist to all non medical gas systems.

### 8.7.14 Bedhead Services

Project Co shall provide bed head services as defined in the Schedule Part 11, Equipment Schedule. Project Co shall ensure that bedhead services are designed and installed in accordance with SHTM 08-03.

#### 8.7.15 Sterilisation

Project Co shall provide clean steam and associated sterilisation plant and distribution systems as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements). Plant and associated systems shall be designed to SHTM 2031 and SHTM 2010. Discharges to drain are to be treated / managed in accordance with SEPA requirements.

# 8.7.16 Special Water Services

Project Co shall provide all special water services required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements), such as but not limited to:

- a) Special supplies such as de-ionised water to laboratory equipment;
- b) Special supplies such as de-ionised water to equipment washers / disinfection equipment; and
- c) Special supplies for Renal Dialysis.

# 8.7.17 Laboratory Gases

Project Co shall provide all laboratory gases required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), such as but not limited to:-

- a) Nitrogen; and
- b) Carbon Dioxide.

All pipework shall be distributed in ventilation spaces within the ceiling void with maximum permissible separation from the electrical services and hot pipe services. Natural gas installation in the building shall comply with the all current Gas Safety Regulations, incorporating emergency manual / automatic isolation in each room with gas draw-offs. Reinstatement of natural gas following emergency isolation shall also follow an inherently safe regime.

# 8.7.18 Local Exhaust Ventilation Systems

Project Co shall provide all LEV systems including but not limited to that required to support the provision of catering, workshop and maintenance facilities on Site.

# 8.7.19 Fume Cupboard & Micro-biological Safety Cabinets

Project Co shall provide fume cupboard and both CAT II and CAT III microbiological safety cabinet exhaust systems as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements). Systems shall comply with NHS Specifications and Guidance documentation which shall include a matched supply system into the room(s) containing fume cupboards and micro-biological safety cabinets. Fume cupboard design and installation shall be to BS EN 14175. Microbiological Safety Cabinet design and installation shall be to BS EN 12469: 2000 Biotechnology - performance criteria for microbiological safety cabinets and BS 5726: 2005 Microbiological safety cabinets.

# 8.7.20 Drainage

Project Co shall provide all necessary drainage to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements) and their aspirations regarding reduced water consumption which shall include but not be limited to:

- a) General foul water drainage;
- b) General surface water drainage;
- c) Kitchen drainage, inclusive of grease traps;
- d) Laboratory drainage;
- e) Radioactive waste:
- f) Drainage from areas handling radio isotopes, or other contaminants such as silver;
- g) Bedpan disposal system; and
- h) Drainage from oil bund areas, inclusive of oil interceptors.

Project Co shall consider the environmental benefits and economic viability of greywater recycling on Site and if beneficial to the project shall incorporate such a system into the building services and flood abatement philosophy for the Site. Project Co's Proposals shall describe fully the system's mode of operation and integration into the Site.

Project Co shall ensure all drainage discharges from Site are strictly in accordance with the limits set by SEPA.

Drainage systems shall be provided which function reliably with the minimum of blockages, leaks etc. Materials and jointing systems with a proven track record shall be chosen.

The design of the system shall be such as to create the minimum disruption in the event of blockages.

Project Co shall construct the drainage installation such that it complies with the "Initial Drainage Proposal" and the Supplemental Drainage Proposal and the relevant provisions regarding drainage in paragraph 4.

# 8.7.21 High Specification Air Conditioning Systems

Project Co shall provide high specification, full function and close control air conditioning systems to support the Board's Clinical Output Specification that are contained in Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), such as but not limited to:

- a) Laminar flow rooms and / or operating theatres; and
- b) Areas handling radio isotopes or other radiological contaminants.

Air conditioning systems installed in the above areas shall be higher specification air conditioning systems with standby motors belted up in accordance with SHTM 03-01, 04-01 and NHS Model Engineering Specification C04.

### 8.7.22 Ventilation and Air Conditioning of Isolation Rooms

Project Co shall provide air conditioning systems to Isolation Rooms to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements), NHS Standard Infection Control Precautions (SICPs) and maintaining strict positive / negative pressure differentials.

Ventilation and air conditioning systems for these rooms shall be designed and installed in accordance with SHTM 03-01, 04-01 and NHS Model Engineering Specification C04. Project Co shall demonstrate how the proposals facilitate the control and management of an outbreak and spread of infectious diseases.

# 8.7.23 Pneumatic Air Tube Transport System

Project Co shall provide a pneumatic air tube transport system for the Facilities with links to the RIE Facilities. The locations to be served in the Facilities are indicated on the RHSC Pneumatic Air Tube Transport System Requirement Table and DCN Pneumatic Air Tube Transport System Requirement Table below and, as required to support the Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements). All of the Facilities pneumatic air tube transport system stations shall deliver to and receive from the laboratories and pharmacy located within the RIE Facilities, Rooms G5119 and S6107 respectively. In addition to the provision of the system within the Facilities, Project Co will also be responsible for the installation of the link to and the system including supporting plant within the RIE Facilities in accordance with predetermined routes advised by the Board. The installation must be consistent with the overall communications policy of the hospital. Project Co shall ensure the pneumatic air tube transport system shall be designed and installed in accordance with SHTM 08-04: Specialist services Pneumatic tube transport systems: Part A: Overview and management responsibilities and Part B: Design considerations and good practice guide. The system shall be 160 mm diameter multiple carrier microprocessor controlled with all associated infrastructure comprising two transmission tubes (one to and one from the RIE Facilities) accommodating up to five carriers travelling simultaneously in any direction. Notwithstanding the foregoing, the system shall be designed to take a minimum of 21 transactions per hour (not including the return of capsules). The system will have a 70% maximum system capacity.

Project Co shall design and construct the Pneumatic Tube System in accordance with the Appendix B (Interface Output Specification) and the relevant provisions of paragraph 4 as regards the PTS.

# RHSC Pneumatic Air Tube Transport System Requirement Table

Ref	Department	Pneumatic Air Tube Delivery System Required and Number	Location	
RHSC SPECIFIC DEPARTMENTS				
Α	Front Door - ED / Assessment Ward			
A1	Emergency Department	2	1 Laboratory Area and 1 outside Resuscitation Room	
A2	Paediatric Acute Receiving Unit - 34 Beds	1	Central Location Staff Base	
В	Critical Care / HDU / Neonatal Surgery			
B1	PICU and HDU's - 24 Beds	2	1 close to Room 5/8 and the other close to Room 14	
С	RHSC In Patient Pathway / Ward Care			
C1.1	Medical Inpatients - 23 Beds	1	Staff Base Central location	
C1.2	Surgical Long Stay Inpatients -15 Beds	1	Staff Base Central location	
C1.3	Neuroscience Inpatients - 12 Beds	1	Staff Base Central location	
C1.4	Haematology / Oncology Inpatients & Daycases - 17 Beds & 2 Chairs	1	Staff Base Central location	
C1.8	Surgical Short Stay Inpatients - 14 Beds	1	Staff Base Central location	
C1.9	Inborn Metabolic Disorders Lab	1		
D	RHSC Ambulatory Care			
D1	RHSC Main Outpatients	2 - (1 Ground Level	In corridor	
		1 First Level)	In the D1 Area Reception Area	
D9	Medical Day Care Unit - 5 Beds	1	Reception Area	
Н	Academic			
H2	Clinical Research Facility	1	Close to reception area	

# **DCN Pneumatic Air Tube Transport System Requirement Table**

Ref	Department	Pneumatic Air Tube Delivery System Required and Number	Location		
DCN SPECIFIC DEPARTMENTS					
L	DCN In Patient Pathway / Ward Care				
L1	DCN Acute Care - 24 Beds	1	Staff Base closest to Resuscitation Room		
L2	DCN Inpatients - 43 Beds	1	Near to MD Staff Office closest to PIU		
М	DCN Out Patient Departments				
M1	DCN Outpatients	1	Reception Area		
JOINT DE	<b>EPARTMENTS</b>				
P	Combined Theatres				
P1	Operating Theatres & RHSC Surgical Day Case Unit	2	1 located close to reception area in DCN & RHSC end		
Q	Combined Radiology				
Q1	Radiology	1	Located close to DCN Reception Area		

### 8.8 Electrical Systems

#### 8.8.1 Main & Sub-Main Distribution

Project Co shall provide a main and sub-main distribution system for the new Facilities incorporating all connections from the utility provided HV supply, LV main switchgear, sub-main cabling and distribution boards as required, to provide separate essential and non-essential supplies to power and lighting throughout the Facilities designed in accordance with SHTM 06-01 and SHTM 06-02 respectively.

The utility provided HV Supply shall include a new Scottish Power substation that may be located adjacent to Car Park F on the Substation Site. Project Co shall comply with the relevant requirements for the Substation Works and Substation HV Cable Infrastructure detailed in paragraph 4 the relevant Interface Proposals and Appendix A.

A new HV board and standby generators shall be housed within a new energy centre which shall supply via an 11kV ring new HV Substations located within the building.

The design of the LV Distribution shall ensure that redundancy is provided throughout the Facilities and include features such as dual fed distribution boards.

Project Co shall incorporate no less than 25% spare capacity (for the Facilities as designed) to the main distribution switchgear, standby generator etc within the Facilities and size the installations (all distribution panels, containment, risers etc.) to accommodate additional future spare requirements.

Project Co shall provide automatic power factor correction equipment in accordance with SHTM 06-01.

# 8.8.2 Standby Generation

Project Co shall provide a standby mains failure generator system for the Facilities to provide 100% power in the event of loss of the mains supply and comply with requirements set out in paragraph 8.6.2 of this Sub-Section C.

The standby generator design shall be based on a N+1 arrangement.

The system shall include for controls to operate and maintain the generator inclusive of facilities to automatically synchronise with the switchboard.

The provision of services to modern healthcare facilities is critical to its continuous operation and proposals shall include adequate resilience and support systems in all areas of the design.

Project Co shall ensure all critical services shall be maintained in the event of:

- a) A primary supply failure;
- b) A main distribution failure; and
- c) A local distribution or equipment failure.

Loss of any critical service shall not disrupt the operation of the Facilities and sufficient no break back-up systems shall be included to assure continuity of services.

In sizing the generators Project Co shall include the 25% spare electrical capacity identified for the general power distribution systems.

Project Co shall ensure the quality of generated supply is to be compatible with the requirements of specialist clinical equipment.

# 8.8.3 Electrical Small Power

Project Co shall provide socket outlets throughout the Facilities to provide for general facilities, cleaner's requirements and for connection of particular items and portable equipment as required throughout the Facilities. Project Co shall provide power supplies suitable for personal domestic appliances (e.g. hairdryer) in changing rooms. Segregation shall be provided between "clean" and "dirty" power supplies.

Project Co shall provide all necessary single and three phase power supplies for plant and equipment.

# 8.8.4 Lighting

The lighting installation shall be designed by Project Co to comply with the latest versions of the following publications and all other relevant guidance including CIBSE Lighting Guides and in particular LG2

Project Co shall provide the lighting levels and uniformity of light suitable for the task to be carried out and in accordance with the appropriate guidelines. The Board requires a lighting design / installation which provides good uniformity over the task area i.e. ≥ 80%.

Project Co shall ensure that luminaires are complete with an appropriate high efficiency diffuser / controller and be suitable for the application for which they are proposed.

Project Co shall incorporate the use of daylight into the lighting design. Project Co shall design and orientate the building such that the daylight can be used to best effect, supplemented by the artificial lighting system to provide the appropriate levels of illumination.

# 8.8.5 Interior Lighting

All access routes to plant areas shall be lit to provide safe access for maintenance.

Hazardous areas shall be provided with the appropriate classified luminaires.

All light switches for public areas shall be provided such that they cannot be operated by unauthorised persons.

Whilst the lighting design must be functional for clinical use, Project Co shall ensure that the overall lighting concept will produce an aesthetically pleasing environment. All lighting equipment shall be co-ordinated with the building structure. Project Co shall aim to use a mixture of fittings and retail lighting techniques to create a welcoming atmosphere and balanced visual environment.

Project Co shall provide and install the most energy efficient form of lighting to provide occupiers with improved visual comfort while reducing noise levels and running costs.

Project Co shall ensure that corridor lighting is multi circuited to facilitate use of 100% or 50% of the luminaires. Where the corridor is over 15 metres in length, consideration shall be given by Project Co to zoned lighting and the use of presence detection sensors to maximise efficiency.

Night lighting shall be provided within all corridors either by individual fittings or by selective switching of the general corridor wall/ceiling luminaires. Project Co shall ensure night lighting in corridors shall not spill into patient bedrooms, or other bedded areas.

Luminaires shall be located to provide ready access for lamp changing and maintenance, whilst still providing the recommended level and quality of illumination to the area.

Night lighting shall be provided at nurse stations, patient bed areas and locations where call systems are installed.

Artificial illumination shall be provided to Treatment (activity / consulting) Rooms, etc by fully recessed, hermetically sealed modular light fittings, switched at the room door positions. Treatment Room luminaires which provide the general lighting shall be controlled by at least two circuits depending on the arrangement of fluorescent tubes in each fitting. The design of these luminaires by Project Co must provide ease of access for lamp changing.

Luminaires, their colour and material finish shall be selected to co-ordinate with the architectural intent throughout the circulation areas. Low wattage 2700K luminaires to be used in particular rooms shall be selected on their ability to create a calm and "homely" atmosphere. Project Co shall consider the inclusion of wall mounted luminaires and /or uplighters.

All lamps used in clinical areas shall have as a minimum a colour rendering capability of  $\geq$  85 CRI. For practical reasons consideration shall be given by Project Co to using the same luminaire in both clinical and non-clinical spaces within the same ward. A reading light with an on/off switch shall be provided at each bedhead location. Project Co shall provide an additional switch on the nurse call handset.

Where luminaires of the fully recessed type (modular and / or downlighter) are installed within fire rated ceilings, they shall be provided with a one hour rated fire canopy. Project Co shall also ensure that they maintain the integrity of the ceiling and that the canopies are tested to "BS 476 Fire tests on building materials and structures Parts 20 and 23, clause 5. Project Co shall also ensure that all canopies meet the requirements of Class O materials".

Luminaires with prismatic diffusers installed on fire escape routes shall be fitted with flame retardant diffusers to TP(a) classification in Part B (Fire safety) of the Building Regulations in England: Light Diffusers and Wall Coverings, minimum Class 3 surface spread of flame.

Bed head observational lighting (watch lighting) shall be provided where specified in high dependency and critical care wards. The observational lighting shall be separately switched and controlled from the general lighting. Refer to Schedule Part 11, Equipment Schedule for details of where observational lighting is required

Wall or ceiling mounted examination lighting shall be provided where specified in intensive therapy, high dependency and coronary units. Refer to Schedule Part 11, Equipment Schedule for details of where examination lighting is required

Laser and x-ray warning lights shall be provided outside theatres, major treatment rooms and x-ray rooms and interfaced with the laser / x-ray machines

Food factory type luminaires shall be provided in areas in which food is prepared, cooked and stored.

Ensure that in the entrance areas, functional lighting is supplemented by additional lighting to enhance the interior and create an aesthetically pleasing environment.

Plant areas, roof void areas, ducts, lift motor rooms, shafts and similar utility areas shall be additionally illuminated utilising suitably IP rated luminaires.

Project Co to provide over-mirror lights in all male and female changing rooms, where indicated in the Schedule Part 11 (Equipment Schedule).

### 8.8.6 Exterior Lighting

The perimeter, including any main entrance canopies and pedestrian walkways, to all buildings shall be lit by the use of LED energy efficient luminaires mounted on walls, columns and/or bollards. All on-site access roads, footpaths and cycle ways shall be lit to levels compatible with the adjacent roads. The lighting shall satisfy the requirements of BS EN 13201 and BS 5489:2003 Code of practice for the design of road lighting. Lighting shall be provided to all direction signs around the Site where these are not adequately illuminated by external lighting.

All access routes to plant areas shall be lit to provide safe access for maintenance.

All wall mounted luminaries shall be fed by back entry. Cable runs on the outside of buildings shall not be permitted.

All external columns, bollards etc. shall be provided with fused cut-outs and termination facilities for cabling.

All luminaries shall be wired on multiple circuits to avoid loss of light to whole areas in the event of a mains/circuit failure.

Project Co shall illuminate the main entrances, the buildings perimeter and pedestrian walkways by use of energy efficient luminaires, wall, column and / or bollard mounted. The installation shall achieve the requirements of BS EN 13201 and BS 5489:2003 Code of practice for the design of road lighting, providing external lighting for safety and security purposes.

When selecting luminaires, Project Co shall give consideration to light pollution, vandalism, security, energy efficiency and local residents' needs.

Project Co shall control external lighting to minimise energy consumption, by photocell or movement sensor, the lamp type selected must be sympathetic to frequency of switching dictated by the control means. Project Co shall consider the use of solar powered lighting.

## 8.8.7 Lighting Control & Wiring

Project Co shall provide automatic control of lighting control using natural light level sensing. Control lighting for unoccupied periods by use of the BMS scheduling capability, with movement sensing override for safety. Project Co shall provide a safe minimum light level at all times.

Project Co shall ensure that the lighting design incorporates a flexible switching arrangement to allow for varying activities within each room and for cleaning purposes. Switches for public areas shall be positioned by Project Co so that unauthorised persons cannot switch the lighting.

Lighting within all WC's, Staff WC's and changing rooms shall be controlled via passive infrared sensors/movement detectors or similar, with adjustable time control facilities.

Lighting within clinical areas shall be manually controlled.

Project Co shall arrange the circuiting of luminaires to control groups of fittings in order to provide flexibility of switching arrangements. Such a facility is particularly important in large spaces where the level of daylight is not uniform and artificial lighting is likely to be needed for long period in areas remote from windows.

Project Co shall provide alternative circuits together with two-way or intermediate switching at all section doors and corridor direction changes for lighting in corridors and circulation areas.

Where multi-gang lighting control switches are required Project Co shall provide a label fixed to the grid under the switch plate, indicating the switches are fed from different supplies.

Project Co shall wire lighting circuits within rooms/areas on the same phase as the general power circuits.

## 8.8.8 Emergency Lighting

Project Co shall connect the emergency lighting to addressable self-monitoring control panels with each luminaire containing an interface unit that will be monitored and controlled by the control panel which shall report to the BMS system. Project Co shall ensure that the emergency luminaires are automatically tested in accordance with the requirements of the British Standards.

The emergency luminaires may be of either the maintained or non-maintained variety. Project Co shall ensure that they are powered by a suitable battery supply connected by an autochangeover switch or utilise self-contained battery packs within luminaires (3-hour rated). Project Co shall ensure that the emergency luminaires will be automatically energised in the event of a failure to the local lighting circuit.

Project Co shall comply with the requirements of BS 5266 Emergency Lighting and European Legislation CEN/TC 169 WG3 Emergency Lighting of Buildings.

## 8.8.9 Standby Lighting

Project Co shall provide 100% standby lighting via the generator to enable normal activities to continue during the loss of a normal mains supply.

Project Co shall ensure that the quality of standby lighting is equal to that of the normal lighting at the task points.

## 8.8.10 Uninterruptible Power Supplies

Project Co shall provide Uninterruptible Power Supplies (UPS) to serve life-support equipment within area and rooms listed in the UPS Required Table below and the requirements of Board's Construction Requirements of this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) in accordance with SHTM 06-01 Electrical Services. UPS to be provided to individual rooms shall be as stated on the Room Data Sheets. Project Co shall provide UPS for the Helipad and the NHS Lothian Server Room's ventilation/cooling. The UPS shall provide a no-break supply during loss of normal mains power supply and subsequent emergency generator power supply. The UPS System shall be of modular parallel design and will have N+1 redundancy. The Board shall only provide the IT dedicated UPS for the NHS Lothian Server Room and NHS Lothian Node Rooms. Project Co shall provide the power for the UPS provided by the Board. UPS requirements for the UPS provided by the Board in the NHS Lothian Server Room and NHS Node Rooms are detailed in the Responsibility Matrix within paragraph 9.7 under IT dedicated UPS.

## **UPS Required Table**

Level	Area	Rooms
Basement		
Ground Floor	Emergency Department  Co-Joined Radiology	Resuscitation Room(s) 4 Major Treatment Rooms  MRI Rooms CT Rooms Gamma Camera Rooms Control Rooms
First Floor	Co-Joined Theatres	9 Theatres and anaesthetic rooms MRI Room Angiogram Interventional Room Recovery Spaces
	Critical Care	24 Cubicle Spaces
	DCN Acute Care	Receiving / Resuscitation Room
Second Floor	Ehealth	Server Room's ventilation/cooling
Third Floor	Medical In-Patients	Transitional Care Rooms
Fourth Floor / Roof	Helipad	Helipad RFFS Accommodation Helipad Fire Suppression System Lighting to Helipad; Helipad ramp and Helipad stairs

These units shall provide one hour standby duration in accordance with relevant NHS Requirements documents.

### 8.8.11 Lifts

Project Co shall provide bed passenger lifts (suitable for inclusion of at least one hospital bed (orthopaedic bed)), goods lifts, service lifts (dumb waiters), general passenger lifts and evacuation lifts for emergency conditions within the buildings in accordance with but not limited to SHTM 08-02, SFPN 3 and SHTM 81. All lifts provided for the movement of patients shall be supplied from the essential services supply in accordance with SHTM 06-01.

Three of the lifts in the DCN / 'Hot' core are to provide access to helipad located on the roof. Two in number Patient Bed lifts and one in number FM lift shall serve the roof area that the helipad is located on. The lifts are to have call buttons at roof level and key operated access to the roof from inside the lifts.

RHSC Patient Bed and Passenger lifts shall not stop at floors that are exclusively served by DCN departments with manual override.

DCN Patient Bed and Passenger lifts shall not stop at floors that are exclusively served by RHSC departments with manual override.

Project Co shall give consideration to the following in the provision of lifts:

- a) The lifts shall be vandal / damage proof but aesthetically pleasing and appropriately sized (min size for bed and associated equipment);
- b) A minimum of one lift shall be sized to accommodate the lifting of the major component parts of medical equipment for replacement during maintenance with particular attention given to lifting the MRI scanner components to and from the ground and upper floors. Project Co shall require to liaise with relevant clinical and estates staff to identify the most onerous components during the design stage. When the more onerous components are to be used the Board will have the right to decide what constitutes the more onerous component.
- c) Banks of lifts shall be appropriately controlled to maximize movement;
- d) Collective controls of groups of lifts shall be used;
- e) All floors including plant levels shall be served
- f) Project Co's control rooms shall be easily accessible and designed to minimise the need for artificial cooling;
- g) Emergency hands free telephones in lifts shall be accessible to the blind, partially sighted, deaf and wheelchair users. Telephones shall be linked to lift car audio inductive loop;
- h) Lifts for people and goods shall be separated;
- i) Dedicated lifts are required for theatres or swipe controlled staff access override; and
- j) Disabled friendly controls, information etc (wheelchair accessible height of buttons, tactile numbers, voice messages, and visual alarm) shall be incorporated in the lift design.

#### 8.8.12 Escalators

Where Project Co provides escalators within the buildings they shall adhere to the requirements of all relevant British Standards and in particular with BS EN 115 Safety of escalators and moving walks.

### 8.9 Lightning Protection & Earthing

Project Co shall provide a lightning protection system for the protection of the structure, the contents and occupants. The lightning protection installation shall be in accordance with the latest version of BS EN62305 Protection against lightning. The lightning protection system shall comprise of air termination network, down conductors, earth termination network and all required equi-potential bonds.

Project Co shall provide a system of earthing that shall ensure sufficient and fast operation of protective systems in the case of earth faults.

The earthing system shall comply with BS7671:2008 Requirements for electrical installations (IEE Wiring Regulations), BS7430:1998 Code of Practice for earthing and with the Electricity at Work Regulations 1989.

The earthing system shall comprise of earth electrode system, main and supplementary earth bars, main and supplementary equi-potential bonding.

## 8.10 Fire Detection & Suppression Systems

Project Co shall ensure that the fully addressable automatic fire detection system for the Facilities is fully compliant with the performance criteria laid down under SHTM 82 (including Supplement A) and the latest revisions to BS 5839. The design of the Facilities shall be in full accordance with HTM 05-02, including both vertical and horizontal compartmentation and evacuation routes. All circulation doors shall be installed with integrated electro-magnetic door hold open devices with all security door locks interlocked for evacuation in a fire condition.

Project Co shall provide sprinkler protection to those departments surrounding High Dependency departments (above, below and adjacent on the same level) as required by SHTM 82 Section 3.

Project Co shall ensure that the system must be an L1 fully addressable analogue system incorporating an auto-dialler / monitoring facilities with the capability for remote site monitoring via an internet PC connection. The system should also be provided with a full 2 way communication link to the RIE Facilities, subject to the details being agreed with the Board and Consort as part of the Project Co's Proposals and/or as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement and provided. Project Co shall carry out the necessary connection work to the fire alarm system at the interface with the Link Building in accordance with the Interface Output Specification for the Link Building, the Connection Proposal and the relevant provisions of paragraph 4.

The system shall be equipped with sufficient sounders to maintain sound outputs in different areas in accordance with SHTM 82, and incorporate visual strobe indicators for a fire condition in accordance with the requirements of the Equality Act 2010. Project Co will provide voice evacuation announcements and shall agree with the Board if manual voice evacuation or preprogrammed announcements are to be provided as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Project Co shall ensure that the Facilities are divided into zones by ward / department / unit area as well as by floors with mimic or repeater panels at each nurse station (or equivalent) and at least one panel per floor located in a central circulation area. In the event of fire the Facilities shall be capable of individual zone evacuation with all other zones receiving awareness signalling. Project Co shall ensure that all fire alarm panels are capable of giving details of system status for fire, fault, and alarm conditions including full text descriptions of location. All panels shall be capable of data / event logging and report generation. Manual call points must be provided at every exit and staircase with no point in the building being more than 30m travel from a call device.

Materials and equipment shall be the catalogued products of manufacturers regularly engaged in production and installation of automatic fire detection systems and shall be manufacturer's latest standard design that complies with the Board's Construction Requirements.

Project Co shall ensure that this system will have a documented history of compatibility by design for a minimum of 15 years. Future compatibility shall be supported for no less than 10 years. Compatibility shall be defined as the ability to upgrade existing systems to current level of technology, and extend new field panels on a previously installed network.

Project Co shall take into account the need for maintaining patient security during alarm testing i.e. the testing regime shall not allow for ordinarily secure doors to open as a result of routine testing.

Project Co to provide fire suppression systems in NHS Lothian Server rooms, IPS Room and main HV and LV switchrooms.

Fire hose reels are not acceptable within the Facilities. For the avoidance of doubt, Project Co shall provide all fixed fire fighting equipment to comply with statutory requirements and the requirements and recommendations of NHS Scotland Firecode.

Project Co shall review requirements for fire hydrants with The City of Edinburgh Council's Building Control Department and Scottish Fire and Rescue Service.

The fire systems for the Facilities will have to be designed and constructed and replaced, repaired, renewed and maintained such that they may be connected to, communicate and operate with the fire systems at the RIE Facilities. It is envisaged that such connections and a control box for the fire systems will be proximate to the Link Building. The rights to make and replace, repair, renew and maintain such connections are subject to design, construction and other information being provided as part of Project Co's applicable Interface Proposal for approval by the Board and Project Co shall comply with the requirements for installing, maintaining, repairing, renewing and replacing interface links between the fire alarm system within the Facilities with those within this RIE Facilities as part of the RIE Works subject to and in accordance with:

- a) Section 7 (Link Building) of Part 1 (Interface Construction Issues and Interface Proposals) of Appendix A;
- b) Interface Output Specification; and
- c) Connection Proposal.

## 8.11 Information and Communications Technology

Refer to paragraph 9.

## 8.12 Engineering Flexibility & Zoning

Heating, ventilation, electrical and medical gas zoning shall be configured to promote flexibility in order to enable re-modelling and re-planning to be undertaken at a future date.

All engineering services shall be zoned with isolation and safety provision, for the whole of the Facilities and for individual wards and departments. Project Co shall also ensure that zoning accounts for:

a) The requirement for "dirty" / "clean" separation;

- b) Solar movement; and
- c) The necessity for isolation of part of the Facilities without affecting the entire Facilities.

## 8.13 Services Capacity Reserve

In accordance with Good Industry Practice, all plant, plant spaces and building services systems shall be specifically designed and provided with defined reserve capacity allowances and future expansion capabilities for the Facilities (e.g. distribution boards with 25% spare capacity for the buildings as designed).

In addition to the reserved capacity allowances in relation to the building as defined in this Sub-Section C, Project Co shall also ensure reserve capacity, service termination, zoning and general arrangement supports any future extension of the building that may be an optional feature of Project Co's Proposals.

### 8.14 Service Routes

All service voids, risers and other spaces shall allow for installation of additional services and shall provide a defined reserve of a minimum 25% of useable area through routing cross sectional area. All isolating valves and other items requiring particular access shall be positioned at convenient locations with permanent access provision and which do not impede execution of the clinical functions or and/or provision of the Clinical Services in the space.

Services shall be arranged in a clearly zoned spatial hierarchy in ceiling voids, risers and plant spaces.

Access to services shall not be given in clinical areas.

All service voids, risers, plant rooms and other service / plant spaces shall be designed to easily facilitate the future removal of building services within each space.

In order to minimise potential disruption to the Board due to maintenance of building services, Project Co shall where practicable route services through common spaces such as corridors and avoid through routing within department areas.

All new ductwork shall be provided to allow cleaning of internal surfaces and components to be undertaken as detailed in the HVCA Document TR19 Cleanliness of Ventilation Systems.

### 8.15 Commissioning & Testing

All buildings, services and equipment shall be commissioned by Project Co to ensure that all they are compliant with the quality and performance specifications, including manufacturer's recommendations, and that all systems operate to the Board's satisfaction.

Project Co shall as a minimum commission the Facilities in accordance with the 'Guidance to Engineering Commissioning' published by The Institute of Hospital Engineers (1995).

Project Co shall be responsible for demonstrating and certifying to the Board the successful completion of all commissioning testing, and compliance with all relevant standards.

Project Co shall provide a comprehensive set of Operation and Maintenance Manuals (in hard and electronic forms) for all installed and commissioned equipment in a format specified in

paragraph 4.5.17 and in accordance with the requirements in Clauses 17.18 and 18 of the Project Agreement.

Project Co shall provide such staff training as is deemed necessary by the Board details of training proposed shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

## 9 Information and Communications Technology (ICT) Requirements

#### 9.1 Introduction

The Board recognises the importance of information and communication in the provision of Clinical Services and Non-Clinical Services and Operational Services in the modern health care environment; having the right information available and efficient means of communication enables improved efficiency. There is an increasing reliance on ICT infrastructure to meet these requirements both in terms of performance and availability.

This specification is intended to co-ordinate the various aspects of ICT provision within the Board's operations. The specification does not describe all individual systems and their operation in great detail, but identifies the various information and communication systems, the Board's current strategies for their development and maintenance, the obligations placed on Project Co.

Although this paragraph 9 will be of prime interest to the ICT designer, there is information contained here that Building Services designers and Architects may require for their designs.

## 9.2 Overall Requirements

Project Co shall design, construct, manage and maintain/lifecycle replace the ICT systems for the Facilities as identified within the responsibilities matrix, in paragraph 9.5. For avoidance of doubt, this includes the detailed requirements set out in the Interface Output Specification and Connection Proposal and relevant provisions of paragraph 4 and in the Schedule Part 11, Equipment Schedule.

Particular consideration shall be given to how ICT can be used to aid patient and staff flow throughout the Facilities.

Project Co shall comply with the NHS Lothian E-Health Strategy for those ICT systems that Project Co has a design/construction/management responsibility. Project Co shall take cognisance of the current NHS Lothian E-Health Strategy in place at the time of lifecycle replacement of individual ICT systems, ensuring continued compatibility with NHS strategy/policy at the time of the ICT system replacement.

## 9.3 Design Requirements

Project Co shall comply with the following requirements for those ICT systems that Project Co have a design responsibility, as identified within the Responsibilities Matrix, in paragraph 9.5.

## 9.3.1 User / Functional Requirements

Project Co shall liaise with the Board to robustly identify and capture all User and Functional Requirements required within each ICT system to support key departmental operational requirements.

Project Co shall ensure that these captured User and Functional Requirements are achieved within the design and construction of the ICT systems, including the selection of appropriate and compatible manufacturer products and systems.

## 9.3.2 System Availability

Project Co shall design the infrastructure and each of the other systems to meet the Availability targets set by the Board. This shall include the provision of appropriate hardware and software redundancy within the system design.

## 9.3.3 System Assurance

Project Co shall demonstrate that the proposed ICT design solutions comply with the Board's User and Functional Requirements.

Project Co shall submit a Reliability Block Diagram (RBD) for each ICT system to demonstrate that the Board's System Availability targets are met. This shall highlight the Mean Time Before Fail (MTBF) data for each hardware component of the system and show the required hardware and software redundancy implemented within the design.

Project Co shall provide ICT systems that are fully compatible with and support the delivery of the NHS Lothian E-Health Strategy.

#### 9.4 Minimum Engineering Standards

In addition to the publications in paragraph 2 Project Wide Requirement, Project Co shall ensure that the design, construction and selection of components for the ICT works comply with, but not limited to, the following design reference documents:

- a) All current relevant British Standards;
- b) European Harmonised Standard Specifications and Codes of Practice;
- c) Applicable NHS Requirements
- d) Electromagnetic Compatibility Regulations 2006;
- e) ISO/IEC 11801:2002 Information Technology Generic Cabling for Customers Premises;
- f) BS EN 50173-1: 2011 (Information Technology Generic Cabling Systems)
- g) BS EN 50174-1: 2009 (Information Technology Cabling Installation Part 1 Specification and Quality Assurance)
- h) BS EN 50174-2: 2009 (Information Technology Cabling Installation Part 2 Installation Planning and Practices inside Buildings)
- i) BS EN 50174-3:2003 (Installation technology. Cabling installation. Installation planning and practices outside buildings)
- j) BS 6701:2010 Telecommunications equipment and telecommunications cabling. Specification for installation operation and maintenance.

- k) BS 7718: 1996 Code of Practice for Installation of Fibre Optic Cabling.
- I) BS 7430: 1998 Code of Practice for Earthing
- m) BS EN 50310: 2000 Application of Equipment Bonding and Earthing in Buildings with Information Technology Equipment
- n) TIA/EIA-568 B-SET: 2001 (Commercial Building Telecommunications Cabling Standards).
- o) TIA/EIA-569 B-SET: 2004 (Commercial Building Standard for Telecommunications Pathways and Space).
- p) TIA/EIA-606-A: 2002 (Administration Standard for commercial Telecommunications Infrastructure)
- q) TIA/EIA-607: 1994 (Commercial Building Grounding and Bonding Requirements for Telecommunications)
- r) TIA/EIA-TSB67: 1995 (Transmission Performance Specifications for Field Testing of Unshielded Twisted Pair Cabling Systems)
- s) ISO/IEC 11801:2002/Amd 2:2010/Cor 1:2010 (Information Technology Generic Cabling for Customer Premises)
- t) Relevant technical specifications (or equivalent) in the following order of precedence;
- u) British Standards transposing European Standards;
- v) European technical approvals;
- w) common technical specifications;
- x) International Standards; or
- y) other technical reference systems established by the European standardisation bodies.
- z) If the technical specifications referred to in u) are insufficient to meet the ICT requirements, Project Co shall make reference to the following technical specifications (or equivalent):
- aa) British Standards;
- bb) British technical approvals;
- cc) British technical specifications relating to the design, calculation and execution of the work or works and use of the products; or
- dd) DfT publications, standards and technical memoranda.
- ee) Relevant OFTEL and DTI Standards, Publications and Regulations.
- ff) Relevant Legislation.

In complying with any standard, Project Co shall equally comply with any published amendments and revisions issued up to Financial Close.

#### 9.5 Responsibilities Matrix

Responsibilities for the delivery of aspects of the various ICT systems are set out in the table below:

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace	
1. Information Technology (IT)					
System management	N/A	N/A	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)	
System architecture, design	Project Co to Board approval	Project Co	Board	Project Co	
Hardware (inc. PCs, printers)	Board	Board	Board	Board	
Hubs, servers/switches	Board	Board	Board	Board	
NHS Lothian Server Room	approval	Project Co	Board	Board	
NHS Lothian Node Rooms	Project Co to Board approval	Project Co	Board	Board	
Containment	Project Co to Board approval	Project Co	Project Co	Project Co	
Cabling and faceplates	Project Co to Board approval	Project Co	Project Co	Project Co	
Testing & Commissioning of Project Co Equipment	N/A	Project Co (with Board in attendance)	Project Co	Project Co	
Testing & Commissioning of Board Equipment	N/A	Board	Board	Board	
IT dedicated UPS	Project Co (infrastructure only) to Board approval - Board to provide as a part of Hardware	Project Co (infrastructure only) - Board to provide as a part of Hardware	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)	
Final connections to hardware, hubs, UPS, external links and other equipment	N/A	Board	Board	Board	
Facilities for seminar rooms, presentation spaces, reception areas, offices	Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)	
Links to Other Organisations	Project Co (infrastructure only) to Board approval	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)	
Video Conferencing links/ facilities – external, internal	Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)	

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
Patient Location	Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
Equipment Tracking	Schedule Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
2. Telephone System				
System management System architecture/design	N/A Board	N/A Board	Board Board	Board Board
Telephony System Operator Console	Board Board	Board Board	Board Board	Board Board
Hand sets	Board	Board	Board	Board
Pagers / staff location system	Board	Board	Board	Board
Containment	Project Co to Board approval	Project Co	Project Co	Project Co
Cabling and faceplates	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning of Project Co Equipment	N/A	Project Co (with Board in attendance)	Project Co	Project Co
Testing & Commissioning of Board Equipment	N/A	Board	Board	Board
Final connections to Telephony system	N/A	Board	Board	Board
Telephone System dedicated UPS	Project Co (infrastructure only) - Board to provide as a part of Hardware	Project Co (infrastructure only)	Board	Board
Fallback PBX system: Resilient cabling from RIE facilities to the Facilities	Project Co to Board approval	Project Co	Project Co	Project Co
3. Bedhead Services				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co
Nurse Call	Project Co to Board approval (see 4. Nurse Call)	Project Co (see 4. Nurse Call)	Project Co	Project Co
Medical gases	Project Co	Project Co	Project Co	Project Co
Electrical supply	Project Co	Project Co	Project Co	Project Co

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
Bed lighting	Project Co	Project Co	Project Co	Project Co
ICT – Clinical (Data Outlet(s))	Project Co	Project Co	Project Co	Project Co
ICT – Patients/Public (Data Outlet(s))	Project Co	Project Co	Project Co	Project Co
Voice Outlet	Project Co	Project Co	Project Co	Project Co
TV and Radio facilities	Project Co (containment and wiring only)	Project Co	Board	Board
3. Bedhead Services (Co	nt'd)			
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
4. Nurse Call				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co
Nurse Call System	N/A	Project Co	Project Co	Project Co
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
5. Fixed Induction Loops	<u> </u>			
System management	Project Co	Project Co	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co
System provision	N/A	Project Co to install complete system with potential for expansion	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
6. Security Systems				
6.1 CCTV				

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
System management	N/A	N/A	Project Co	Project Co
System architecture / design	Project Co to Board approval	Project Co	Project Co	Project Co
CCTV cameras, detectors, scanners, access units	Project Co to Board approval	Project Co	Project Co	Project Co
Monitors, multiplexes, control equipment hardware and software, recording equipment, servers	Project Co to Board approval	Project Co	Project Co	Project Co
CCTV Equipment Room(s)	Project Co to Board approval	Project Co	Project Co	Project Co
6.1 CCTV (Cont'd) Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
Final connections to hardware	Project Co to Board approval	Project Co	Project Co	Project Co
6.2 Access systems (to b	e integrated with ala	arm system)		
Doors and restricted areas	Project Co	Project Co	Board	Project Co
Hold open devices to minimise door damage & fire risk, and optimise "openness" of internal spaces	Project Co	Project Co	Project Co	Project Co
6.3 Alarms (to be integrated	ted with access con	trol system)		
Intruder	Project Co to Board approval	Project Co	Board	Project Co
Personal safety alarms	Project Co to Board approval	Project Co	Board	Project Co
Equipment alarms (Board)	Project Co to Board approval	Project Co	Board	Project Co
Equipment alarms (Project Co equipment)		Project Co	Project Co	Project Co
Lift alarms, link to emergency base (REM or similar)	Project Co to Board approval	Project Co	Project Co / Board	Project Co
7. Wireless Network				
System management	N/A	N/A	Board	Board
System architecture / design	Project Co to Board approval	Project Co	Project Co	Project Co

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
Wireless Network Cabling Infrastructure	Project Co to Board approval	Project Co	Project Co	Project Co
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Wireless Access Point locations (Inclusive of Wireless Surveys)	Project Co to Board approval	Project Co	N/A	N/A
7. Wireless Network (Cor	nt'd)			
Wireless Access System (LAN Controllers, Wireless Control System, Wireless Access Points and network interface / firewalls. This list is not exclusive).		Board	Board	Board
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
Final connections to wireless network	N/A	Board	Board	Board
8. Intercom				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval, refer to Sub-section D Specific Clinical Requirements	Project Co	Project Co	Project Co
Intercom System	N/A	Project Co	Project Co	Project Co
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
9. Video Telemetry				
System management	N/A	N/A	Project Co	Project Co
System architecture/design	Project Co to Board approval, refer to Sub-section D Specific Clinical Requirements	Project Co	Project Co	Project Co
Video Telemetry System	N/A	Project Co	Project Co	Project Co
Video Recording Equipment	N/A	N/A	Board	Board
Containment and cabling	Project Co to Board approval	Project Co	Project Co	Project Co

Service / Technology	System Design	Construction / Provision	Management	Maintain/ Lifecycle Replace
Testing & Commissioning	N/A	Project Co (with Board in attendance)	Project Co	Project Co
10. Others				
Public Area Phones	Project Co (infrastructure and equipment except handset) / Board (handset)	Project Co (infrastructure and equipment except handset) / Board (handset)	Project Co (infrastructure and equipment except handset) / Board (handset)	Project Co (infrastructure and equipment except handset) / Board (handset)
10. Others (Cont'd)				
Television / radio, common areas/patient information systems – Groups 2A, 2B and 3 Equipment as per Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) to Board approval, refer Schedule Part 11, Equipment Schedule	Project Co (infrastructure only) / Board (equipment)	Board (equipment) / Project Co (infrastructure)	Board (equipment) / Project Co (infrastructure)
11. Building Management System (BMS)				
System management	Project Co	Project Co	Project Co	Project Co
System architecture/design	Project Co to Board approval	Project Co	Project Co	Project Co

Where in the foregoing table any item is stated to be for the Board approval then all information relating to such item shall be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

## 9.6 Structured Cabling System

The Structured Cabling System (SCS) shall be a single fully integrated design to provide the physical connectivity for the following systems, as a minimum:

- a) Data network;
- b) Voice network.

Project Co shall provide a data network infrastructure capable of supporting as a minimum but not limited to the following systems:

- a) On-line clinical and non-clinical information systems.
- b) Internet, intranet and email services; and
- c) TV and Radio facilities.

Project Co shall provide a voice network infrastructure that is capable of supporting, but not limited to the following systems:

- a) Conventional voice;
- b) Voice over internet protocol (passive provision for future VoIP installation);
- c) Modem and fax services;
- d) Phone to the bedhead;
- e) Public area telephones; and
- f) Public taxi ordering telephones.

Project Co shall ensure that resilience is provided within the voice and data network designs between the NHS Lothian Server Room, each NHS Lothian Node Room and the main RIE facilities, including dual diverse cable routing between each

## 9.6.1 Cabling

The Board's requirement for structured cabling is Cat 6a.

All cabling installed shall allow for a minimum of 25% spare capacity.

Cables, which pass through the infrastructure of a building shall be suitably protected against damage. Through walls and floors this shall involve an appropriate type of sleeve, through any form of metalwork or stiff plastic then a rubber grommet shall be used.

Project Co shall ensure that the installation of the copper and fibre cabling is certified by the manufacturer.

Subject to Board approval, Project Co may nominate a preferred cable system manufacturer.

### 9.6.2 Data Patch Panels

Project Co shall take cognisance of the ICT requirements and provide suitable patch panels for their infrastructure cabling.

### 9.6.3 Data Outlets

The data and voice outlets shall be RJ45 and shall utilise lead-frame technology for improved performance and reduced depth. The outlet contacts shall be silver-plated and positioned at 45° to the copper core of the cable to increase the number of possible re-terminations and provide a gas tight seal.

The outlets shall be appropriate for the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non Clinical Requirements); and the rooms / spaces identified.

### 9.7 NHS Lothian Server and NHS Lothian Node Rooms

Project Co shall provide all NHS Lothian Server and NHS Lothian Node Rooms and any other ICT equipment rooms required to serve the ICT systems to be provided for the Facilities.

Project Co equipment shall be allowed to be installed within the NHS Lothian Server Room or NHS Lothian Node rooms providing individual cabinets are secured. Secure arrangements for Project Co access to shared Server/Node rooms shall be agreed with the Board.

The final size and location of the NHS Lothian Server and NHS Lothian Node Rooms shall be dependent upon Project Co's final design the details of which shall be Reviewable Design Data (e.g. physical restrictions of cable run lengths etc). Project Co shall allow for cabinet sizes 800mm x 1000mm (can be either 42u or 47u) in the NHS Lothian Server Room and 800mm x 800mm (can be either 42u or 47u) in the NHS Lothian Node Rooms.

Project Co shall ensure that the environmental conditions in the NHS Lothian Server and NHS Lothian Node Rooms are sufficient to allow for safe operation and working on plant and equipment. Project Co should also avoid the use of basement spaces due to the risk of flooding. No water, steam or waste services shall be located either in or directly above NHS Lothian Server / NHS Lothian Node Rooms due to risk of water damage. Windows are not permitted in the NHS Lothian Server Room.

UPS for the NHS Lothian Server Room and NHS Lothian Node Rooms is detailed in paragraph 8.8.10 of this Sub-section C.

Project Co shall provide 2 x 200 pair copper cables between the Facilities Server Rooms and each Node Room by diverse routes.

Project Co shall allow for 25% spare capacity within the NHS Lothian Server and NHS Lothian Node Room Cabinets.

## 9.8 Wireless Network

Project Co shall provide 100% wireless network coverage throughout the Facilities.

Project Co, in conjunction with the Board, shall establish the required number of Wireless Access Points by means of a comprehensive wireless access survey of the Facilities.

Subject to Board approval, Project Co may utilise the Board's wireless network for specific applications. Each individual Project Co system proposed to be accommodated on the Board's wireless network shall be agreed individually with the Board on a case by case basis.

Project Co shall ensure that the wireless network is capable of supporting the accurate location and tracking of Wi-Fi-enabled devices through the use of Wi-Fi triangulation.

Project Co shall, in undertaking the wireless access survey and design, take cognisance of the requirements of the Wi-Fi system to fully accommodate the Board's systems, Project Co's systems and public access.

Each Wireless Access Point shall be Power-over-Ethernet (PoE) and Project Co shall provide a single data outlet integrated with the building fabric. The Board shall provide the wireless equipment at each Wireless Access Point, and the cabling used to connect the Wireless Access Point to the data outlet.

#### 9.9 External Services

Routes shall be provided by Project Co from two independent external access points (ducts) to the NHS Lothian Server Room. These shall be of a size suitable for external grade multicore fibre cable(s), and copper multi-core cable(s). Project Co shall ensure that the Board is granted free access to these ducts at all times so that it may access communications services provided by any third party it wishes to nominate.

Project Co shall ensure that resilience is designed into the external interconnectivity between the Facilities and the RIE Facilities, including dual diverse cable routing between each.

## 9.10 Helpdesk

Project Co will establish a Helpdesk in the RHSC building all in accordance with the requirements of Schedule Part 12 Section 1 with associated to infrastructure to receive respond to calls. The helpdesk and infrastructure should also have the facility to receive and redirect calls to the NHSL Estates Helpdesk as necessary.

## 9.11 Communication & Connectivity with the RIE Facilities

#### 9.11.1 Infrastructure

Project Co shall provide two 24 core single mode fibre optic cables (Topology: - Diverse Star; Type: - OS1 - 9 micron; Cores: - 24 for each type with 100% expansion capacity to be provided in the cable tray runs), from the NHS Lothian Server Room in the Facilities to the RIE Facilities, following independent routes for resilience. The connection will be to the Communications Rooms 1 and 2 in the RIE Facilities.

Project Co shall provide two 200 pair copper (minimum) multi-core cables following independent resilient routes to support back up telephones linked to the RIE Facilities PBX.

## 9.11.2 System Connectivity/Interfaces between the Facilities and RIE Facilities

Project Co shall provide links for the Data network to the RIE Facilities. Project Co shall comply with the requirements of the Interface Output Specification, Connection Proposal and the relevant provisions of paragraph 4.

## 9.12 Induction Loop

The design of the Facilities shall include a system of induction loops with suitably located dedicated sockets and signage in areas such as reception areas, bedded bays, single, treatment, consulting, counselling and interview rooms. Additionally, the design shall reflect these requirements in areas such as offices where staff may require this facility.

Project Co shall provide induction loop or infrared systems in accordance with the Equality Act 2010 requirements. The final provision and locations are to be submitted as Reviewable Design Data for review and agreement by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement, dependent upon the final design solutions. The Board would prefer to see a building-wide system installed but experience has shown that this often raises issues of confidentiality.

Project Co shall therefore ensure the provision of portable hand held systems for use by visitors that shall be made available at Enquiry/Information Desks at the Entrances. This shall ensure that the parts of the Facilities not provided with induction loops or infrared systems are made accessible to all users.

The "ear" symbol denoting the presence of an induction loop shall be prominently displayed. A sign shall explain clearly to people using hearing aids how they can benefit from the induction loop.

Alternatively, proven systems that do not raise issues of patient confidentiality can be proposed by Project Co to provide Facilities wide coverage as appropriate.

## 9.13 Public Address System

No requirement for a general public address system within the Facilities.

#### 9.14 Intercom

Project Co shall provide an intercom system for the Facilities to meet the requirements of Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and other areas highlighted in Schedule Part 11 Equipment Schedule and Board's Construction Requirements Part 6 Section 6 Room Data Sheets.

## 9.15 Video Telemetry

Project Co shall provide a video telemetry system within the Facilities to meet the requirements of the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) in the rooms identified. The video telemetry system shall be provided over fibre optic connections between the relevant departments.

## 9.16 Public Telephone Ordering Service

Project Co shall install the telephone system for the public to make free phone calls to order a taxi and contact other organisations that may include Traveline Scotland, Smokeline and NHS24. The Board will determine the organisations to be contacted by the public telephone ordering service. Project Co shall provide a telephone system that shall accommodate new or replacement telephone numbers during the Operational Term. The public telephone ordering service is to be provided in the DCN reception and RHSC reception. The Board will provide the telephone handsets and signage for the handsets as Board Equipment in accordance with the relevant provisions of Schedule 11, Equipment Schedule. The Board will arrange the taxi ordering service prior to Completion and during the Operational Term.

#### 9.17 Security

## **9.17.1 General**

Project Co shall provide security systems specifically designed to meet the requirements of each department / unit.

The systems shall present a secure and reassuring environment for patients, staff, families and visitors by providing appropriate security measures within the particular restraints imposed

by clinical demand and personal freedom. The design of the Facilities shall ensure maximum protection and minimize exposure to crime in internal and external areas.

Project Co shall provide the required control, monitoring and recording equipment within the security office. The security system needs to allow for the security officer to be able to respond to alerts (staff attack and fridge/freezer alarms) when not in the security office.

The design for all security systems shall be in line with the general principles of the approach suggested by Secured by Design.

Local alarm annunciation shall be provided within wards and at the central security desk.

The Board will monitor the CCTV system, including controlling access to, and the disclosure of, CCTV images.

## 9.17.2 Panic Alarm System

Project Co shall provide a panic alarm system, which will provide total coverage for the Facilities. The system shall be capable of emitting both audible and visual warnings to alert staff and security to the fact that there is an attack or a situation has arisen in which patients, visitors or other staff members are in danger. Service requirements shall dictate where the alarm is annunciated but as a general guide the panic alarm shall raise an alarm locally and at the security office. The system shall be capable of highlighting the exact location of the staff member in distress.

The system shall be inclusive of personal panic alarms for all staff.

#### 9.17.3 Nurse Call Systems

Project Co shall provide a comprehensive nurse call system at all bed locations (and ensuites), nurse stations, toilets and showers, TV Rooms and all other areas frequented by patients (refer to Schedule Part 11, Equipment Schedule for details). The system must be capable of emitting both audible and visual warnings for the following situations:

- a) To summon a nurse (Patient to Nurse);
- b) To highlight a medical emergency (Nurse to Nurse); and
- c) To highlight a non-medical emergency (Nurse to Nurse).

Project Co shall ensure that both visual and audible warnings are sited in positions that enable the appropriate staff to respond to the exact location of the call both efficiently and effectively. Project Co shall ensure that the warnings, both visible and audible, shall be specific to the type of emergency and must be consistent throughout all areas of the Facilities. The system incorporates a two-way hands free voice communication system with paging facility.

The nurse call system shall be programmed and configured on a room by room basis to allow the flexibility to transfer individual rooms from any ward nurse call panel to an adjacent ward nurse call panel. The transfer of a room or rooms from one area to another shall then include the "follow me" light above the intervening ward doors and room over door light.

Project Co shall provide systems that comply fully with the requirements of relevant NHS Requirements in particular SHTMs, HTMs, SHBNs and HBNs. In addition these systems shall interface fully with the information technology system to enable on-screen alerts at locations details of which are to be submitted as Reviewable Design Data for review and agreement by

the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

Project Co shall ensure that the nurse call button / cord meet the need of the particular patient that may be required to use the Facilities. Patients may have cognitive problems or have difficulties with mobility. The Nurse Call units for all patients shall be provided with safety cords.

## 9.17.4 Patient Location and Equipment Tracking System

Within the Facilities, Project Co shall provide the infrastructure to allow NHSL to install a real time patient location and equipment tracking system. 9.17.5 Alarms & Intruder Detection System

Project Co shall provide an Intruder Detection System (IDS) within the Facilities to provide out of hours security cover. This shall be provided by PIR Detectors located within the corridors, and rooms with ground floor windows internally adjacent to any roof access points. In addition Project Co shall ensure that restricted areas have door contacts available for monitoring unauthorised entry.

Project Co shall ensure that the proposed alarm systems for the Facilities include lifts, refrigeration equipment and other critical equipment. Project Co shall ensure that the alarm systems can be monitored on Site and also remotely outwith the Facilities.

## 9.17.6 Security Access Control

Project Co shall provide a comprehensive access control system to all external access doors and to internal doors requiring restricted access including access control doors to NHS Lothian Server and NHS Lothian Node Rooms, Main entrance doors to Departments, FM and Patient Bed Lifts, Helipad and each ward. Project Co shall provide a comprehensive access control systems to meet the requirement of the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements). In addition other areas with restricted access as defined by the Board.

Ward access control doors shall also be fitted with a video entry door access system. All video entry camera shall be suitable for viewing of visitors in wheel chairs.

Project Co shall ensure the system includes all necessary power supplies, card readers, actuators, egress buttons and emergency "break-glass" release units.

The system installed by Project Co shall be separate from the Board's data network.

Project Co shall provide door entry video intercom systems to the main entrance door and the delivery entrance.

## 9.17.7 External CCTV

Project Co shall provide a comprehensive colour CCTV system covering all external access points, car parking and external pedestrian circulation routes around the Site.

The system installed by Project Co shall be separate from the Board's data network.

The design shall also take cognisance of the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

Project Co shall ensure that the system comprises a multi-channel digital recorder with a recording frame per second for each camera which is in accordance with a detailed engineering specification to be agreed with Lothian and Borders Police.

The digital recorder shall also control playback of images onto a CCTV monitor.

All recorded images should be of sufficient quality to be used for evidential purposes.

#### 9.17.8 Internal CCTV

Project Co shall provide a comprehensive colour CCTV system covering all corridors, entrances, lift lobbies, First Floor link to the RIE Facilities, Emergency Department, hospital street and other areas where members of the public gather or areas where access is to be restricted i.e. wards.

The system installed by Project Co shall be separate from the Board's data network.

The design shall also take cognisance of the Board's Construction Requirements in this Schedule Part 6 Section 3 Sub-Section D (Specific Clinical Requirements) and Sub-Section E (Specific Non-Clinical Requirements).

Project Co shall ensure that the system comprises a multi-channel digital recorder with a recording frame per second for each camera which is of sufficient quality to allow recorded images to be used for evidential purposes.

The digital recorder shall also control playback of images onto a CCTV monitor.

## 9.17.9 Monitoring of CCTV Images

All internal and external CCTV camera images shall be transmitted back to the CCTV monitoring equipment located within the security office to be provided within the Facilities.

## 9.17.10 Clinical Equipment Alarms

Each ward drug fridge shall be alarmed to warn of common faults. The sounder shall be located locally for ward fridges in areas manned 24/7 or located in the Security base when the area is not manned 24/7.

Each Ultra Low Temperature freezer, laboratory fridge and laboratory freezer in H1 Child, Life and Health, H2 Clinical Research and U1 Specialist Paediatric Biochemistry Laboratory shall be alarmed to warn of common faults. The sounder shall be located locally for fridges and freezers in areas manned 24/7 or located in the security office when the area is not manned 24/7.

## 9.17.11 Car Park Barriers

Project Co shall provide all power and control wiring associated with vehicle access barriers and shall be compatible with card solutions in use on other Board sites.

#### 9.18 TV & Radio Facilities

Project Co shall provide the infrastructure for reception and distribution of television and radio for use by patients, visitors and staff. This shall include external aerials / dishes, containment and cabling / distribution and the like to enable Freeview TV services and Radio Lollipop Radio services to be distributed throughout the Facilities.

Television and radio will primarily be required for individual rooms and spaces as set out in the Schedule Part 11, Equipment Schedule.

## 10 Helipad Requirements

Project Co shall provide a rooftop helipad sited such that it gives direct access to the DCN 'Hot' core.

## **10.1 Minimum Compliance Requirements**

In addition to the publications in paragraph 2 (Project Wide Requirement), Project Co shall ensure that the helipad shall be sited, constructed and maintained in accordance with the compliance requirements contained in:

- a) HBN15-03 Hospital Helipads;
- b) The Air Navigation Order 2009, as amended;
- c) International Civil Aviation Organisation (ICAO) Annex 14 Volume II, as amended;
- d) ICAO Doc 9261-AN/903 Heliport Manual;
- e) CAA Safety Regulation Group CAP 437 Offshore Helicopter Landing Areas Guidance on Standards:
- f) CAA Safety Regulations Group CAP 789 Requirements and Guidance Materials for Operators;
- g) CAA CAP 637 Visual Aids Handbook:
- h) Joint Aviation Authority (JAA) Joint Aviation Requirements JAR-OPS 3: Commercial Air Transportation (Helicopters):

National Fire Protection Association (NFPA) 418 Standard for Heliports (is not a compliance requirement but is good practice guidance).

## **10.2 Helicopter Operators**

The helipad shall be designed to accommodate helicopters provided by the following helicopter operators:

- a) Scottish Ambulance Service Air Ambulance
- b) Ministry of Defence (MOD),
- c) Maritime and Coastguard Agency (MCA),
- d) Police Helicopters,
- e) all other emergency service providers, and
- f) their replacements.

Project Co shall consult with the helicopter operators during the design, construction and operation of the helipad and this will only be done through the Board. Project Co will have no direct contact with the helicopter operators.

## 10.3 Helipad Requirement

The helipad shall be designed to permit daytime landings, night-time landings and take offs and flights affected by poor visibility and low cloud. The helipad will require to pass inspection by the Civil Aviation Authority and Mobile Air Operations Team (MAOT) before the Actual Completion Date particularly with regard to compliant visual aids, lighting and Rescue and Fire Fighting Services (RFFS) provision for the helicopters to be served. Adequate space shall be made available for critical engineering services such as fire fighting, helipad access and helipad lighting. Electrical equipment providing power to the helipad must be supported by an Uninterrupted Power Supply (UPS) provided by Project Co. The lighting shall not cause a trip hazard.

The helipad will be constructed at least 3 metres above the roof with at least one ramp. The ramp(s) shall provide a landing at least 1 metre below the level of the helipad on which RFFS personnel can stand with their fire-fighting equipment to observe the arrival and departure of helicopters. The helipad shall be constructed from fire resistant materials. The helipad's drainage shall be separate from both the surface water and foul water drainage systems and shall only pass into the public drainage system once it had passed through a petrol/fuel interceptor.

The patient route from the helipad to the RIE Facilities and RHSC Emergency Departments will be through the Hot Core. There are to be two patient bed lifts, an FM lift and a stair in the Hot Core serving the helipad. The lifts are to have call buttons at the roof of the building (proximate to the helipad) and have key operated access to the roof from the interior of the lifts. Access to the roof area from the lifts and the stair will have security access control. The lifts and stair core structure must terminate below the level of the helipad.

Project Co shall appoint an aviation design specialist. Project Co shall incorporate the advice and recommendations of the aviation design specialist in meeting the requirements of Schedule Part 6 Construction Matters.

For the avoidance of doubt the Board shall be "the person" referred to in paragraph 2.8 of HBN 15-03 being "the person in charge of an area intended for taking off and landing must cause to be in operation such lighting as will enable the pilot to identify the landing area and direction, and to make a safe landing and takeoff". The Board will provide the trained person for night operations. Project Co shall provide all hardware for the lighting requirements of the helipad. The Board will provide at least one trained person for night operations.

Contrary to paragraph 2.9 of HNB 15-03 the helipad will operate at night, with low visibility and in all levels of cloud cover. The helipad will be provided with Helicopter Approach Path Indicator (HAPI) that complies with CAA CAP 637 Visual Aids Handbook.

There is no requirement for refuelling of helicopters. Helicopters will not be based at the helipad.

The helipad is to be category H2 in terms of ICAO Annex 14 Volume II, Chapter 6 and is to have RFFS to H2 RFFS Standard to comply with CAA Safety Regulations Group CAP 789. Project Co shall ensure that the helipad is sufficiently robust to accommodate the largest of these helicopters in common use in the UK with the exception of the Boeing CH-47 Chinook helicopter or its replacement. In terms of HBN 15-03 item 11.9 the helicopter operator is Air Ambulance.

The RFFS facilities will be provided by Project Co during construction and during the Operational Term. The risk assessment to justify the scale of RFFS facilities and standards will be carried out by the Board and provided to Project Co.

The accommodation for male and female RFFS personnel to store, lay out and put on their protective equipment quickly is to be located on the floor serving the helipad. A drench shower to allow PPE to be cleaned / decontaminated before the RFFS personnel enter the building is to be located by the external entrance to the accommodation for male and female RFFS personnel.

Project Co shall provide the means for CCTV viewing of the whole of the helipad from monitors located in the Security Office. In addition when the helipad is in operation Project Co shall provide the means for CCTV viewing of the whole of the helipad from monitors located in the accommodation for the RFFS personnel.

The Board will provide the RFFS personnel. The RFFS personnel are not expected to spend long periods on the helipad. The Board will provide the RFFS medical equipment. The Board will be required to make contact with the CAA to inspect the (RFFS) and lighting.

The stores for the rescue and medical equipment, complementary fire-fighting agents and dedicated patient trolley and a Unisex WC shall be located on the floor serving the helipad.

The name of the hospital to appear to the pilots is "RIE".

The Board will produce the Development Control Plan that refers to the helipad.

Project Co shall have responsibilities in regard to HBN 00-07: Resilience Planning for the Healthcare Estate for the helipad. Details of the helipad are to be submitted to the Board as Reviewable Design Data for review by the Board in accordance with Schedule Part 8 (Review Procedure) and clause 12.6 of the Project Agreement.

The Board should include specific risks created by helicopters using the hospital helipad in their overall site risk assessments.

The Board shall provide the Helipad Operation Manual and audit the helipad routinely for compliance with the Manual.

## 10.4 Helipad Permissions

The Board will prepare the details for and obtain the necessary permission for the helipad from the Scottish Ministers (in their capacity as land owners). The Board will make the Police aware of the helipad's presence prior to Financial Close.

## **Section 3: The Board's Construction Requirements**

**Sub-Section D: Specific Clinical Requirements** 

This Schedule Part 6 Section 3 Sub-Section D forms the Specific Clinical Requirements included in the Board's Construction Requirements Specification. Project Co shall satisfy all the requirements under this Sub-Section D.

It contains design philosophy and specific requirements for each of the clinical services to be provided from the Facilities.

**Section 3: The Board's Construction Requirements** 

**Sub-Section E: Specific Non-Clinical Requirements** 

This Schedule Part 6 Section 3 Sub-Section E forms the Specific Non-Clinical Requirements included in the Board's Construction Requirements Specification. Project Co shall provide Facilities which interface with all the requirements under this Sub-Section E.

**Section 3: The Board's Construction Requirements** 

Appendix A: Interface with Campus Site and/or Campus Facilities

**Section 3: The Board's Construction Requirements** 

Appendix B: Interface Output Specification

**Section 3: The Board's Construction Requirements** 

**Appendix C: Environmental Matrix** 

**Section 3: The Board's Construction Requirements** 

Appendix D: Not Used

**Section 3: The Board's Construction Requirements** 

**Appendix E: Initial Drainage Proposal** 

**Section 3: The Board's Construction Requirements** 

Appendix F: Access Strategy

**Section 3: The Board's Construction Requirements** 

**Appendix G: Connection Proposal** 

**Section 3: The Board's Construction Requirements** 

**Appendix H: Construction Access Proposal** 

**Section 3: The Board's Construction Requirements** 

Appendix I: Oversail Strategy

**Section 3: The Board's Construction Requirements** 

**Appendix J: Service Proposal** 

**Section 3: The Board's Construction Requirements** 

Appendix K: Substation Proposal

**Section 3: The Board's Construction Requirements** 

Appendix L: Supplemental Drainage Proposal

**Section 3: The Board's Construction Requirements** 

Appendix M: TMS



A bright new future: A project to re-provide services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France

"Re-provision of RHSC and DCN at Little France"

## INVITATION TO PARTICIPATE IN DIALOGUE

# Volume 1 Revision B

Contract Notice Ref: 386758-2012 (2012/S 235-386758)

Lothian Health Board

Waverley Gate

2-4 Waterloo Place

Edinburgh

EH13EG

www.nhslothian.scot.nhs.co.uk

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#### **IMPORTANT NOTICE**

The Invitation to Participate in Dialogue and any subsequent Invitation to Submit Final Tender (together the "Invitation") has been prepared for the purpose of providing certain information to Bidders invited to participate in the competition for the design, build, finance and maintenance of a project to enable the re-provision of services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France ("the Project").

In no circumstances shall the Board or their advisers, consultants, contractors, servants or agents incur any liability or responsibility arising out of or in respect of the issue of the Invitation.

Nothing in the Invitation shall be construed as legal, financial or tax advice.

Any summaries or descriptions of documents or contractual arrangements contained in any part of the Invitation cannot be and are not intended to be comprehensive, nor any substitute for the underlying documentation (whether existing or to be concluded in the future), and are in all respects qualified in their entirety by reference to them.

No legal relationship or other obligation shall arise between any Bidder and the Board unless and until the NPD Project Agreement has been formally executed in writing by the Board and the successful Bidder and any conditions precedent to its effectiveness have been fulfilled.

In this notice, references to the Invitation shall include all information contained herein and any other information (whether written, oral or in machine-readable form) or opinions made available by or on behalf of the Board, their advisers, consultants, contractors, servants or agents in connection with the Invitation or the Project including, without limitation, any additional information made available by the Board throughout the Dialogue Period.

Scots law shall be applicable to the Invitation and the Scottish Courts shall have exclusive jurisdiction.

Each Bidder's acceptance of delivery of the Invitation constitutes its agreement to, and acceptance of, the terms set forth in this Important Notice.

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#### 1 INTRODUCTION

#### 1.1 Purpose of Invitation to Participate in Dialogue

This Invitation to Participate in Dialogue (ITPD) is being issued to the three successful candidates (each of whom shall be a Bidder) shortlisted by the Board following completion of the Pre-Qualification Questionnaire initiated by the Office Journal of European Union (OJEU) notice ref.386758-2012 (2012/S 235-386758) published on 5 December 2012. The ITPD describes the Board's needs and requirements and sets out how Dialogue will be conducted.

#### 1.2 Structure of the Invitation to Participate in Dialogue

The ITPD comprises four volumes of information as follows:

- **1.2.1 Volume 1** contains background information on the Project, the conditions of participation, the arrangements for the Dialogue, the Informal Submissions that Bidders must provide during the Dialogue Period, Draft Final Tender requirements, envisaged Final Tender requirements and how the Board intends to evaluate the Final Tender, award the Project and communicate with Bidders.
- **1.2.2 Volume 2** contains the contractual requirements which are set out in the NPD Project Agreement and schedules, (which include the draft Payment Mechanism) and Articles of Association.
- **1.2.3 Volume 3** contains the specific technical requirements of the Board for the Project including construction (clinical and non-clinical) requirements and Facilities standards, equipping requirements and facilities management requirements.
- **1.2.4 Volume 4** comprises of details of the Data Room available to Bidders during the Tender Period.

#### 1.3 Definitions within Invitation to Participate in Dialogue

- **1.3.1** In terms of the interpretation of the ITPD, unless the context otherwise requires:
  - (a) The masculine includes the feminine and vice-versa;
  - (b) The singular includes the plural and vice versa;
  - (c) The words "include" and "including" shall be construed without limitation;
  - (d) Any reference to a person includes a reference to an individual, company, authority, board, association or other legal entity;
  - (e) Any reference to any directive, statute or statutory provision shall include any directive, statute, or statutory provision which amends or replaces or has amended, replaced consolidated or re-enacted it and shall include any subordinate legislation made under any directive or statute;
  - (f) Save as otherwise provided herein, any reference to a Volume shall be a reference to a Volume of the ITPD to; and

- (g) Save as otherwise provided herein, any reference in this Volume 1 to a section shall be a reference to a section of this Volume 1.
- **1.3.2** The terms used in these instructions to Bidders shall, where the same have been defined in the NPD Project Agreement, bear the same meaning as in the NPD Project Agreement unless otherwise defined hereunder:

**Additional Documentation Submission** has the meaning given to it in Appendix C(i) of Volume 1 of the ITPD;

**Ancillary Agreements** means the Memorandum and the Articles of Association;

**Annual Service Payment** has the meaning given to it in the NPD Project Agreement;

Bidder means each of

- B3 (herein referred to as Bidder A);
- Integrated Health Solutions (Lothian) (herein referred to as Bidder B); and
- Mosaic (herein referred to as Bidder C)

and **Bidders** shall be construed accordingly;

Bioquarter Site has the meaning given to it in the NPD Project Agreement;

**Board** has the meaning given to it in the NPD Project Agreement;

**Board's Construction Requirements** has the meaning given to it in the NPD Project Agreement;

**Board Services** has the meaning given to it in the NPD Project Agreement;

**Briefing Meeting** has the meaning given to it in paragraph 4.4 (Briefing Meeting and Q and A Sessions) of Volume 1 of the ITPD;

**CAMHS** means the Child and Adolescent Mental Health Service currently provided from the Royal Edinburgh Hospital, Morningside Place, Edinburgh.

Campus Facilities has the meaning given to it in the NPD Project Agreement;

**Campus Site** has the meaning given to it in the NPD Project Agreement;

**Certificate of Non-Collusion and Non-Canvassing** means the certificate of that name set out in Appendix H of Volume 1 of the ITPD;

CEC means the City of Edinburgh Council;

**City Development** means the department of City Development within the City of Edinburgh Council;

**Conject** means the Conject information channel, formerly known as BIW, provided by Conject Ltd, a web based construction collaboration portal utilised on the project by the Board.

Conject User Manual means the user manual for Conject set out in Volume 4 of the ITPD;

**Consort** has the meaning given to it in the NPD Project Agreement;

**Core Evaluation Team** means the principal assessment body for procurement, for Pre-Qualification Questionnaire, Dialogue and evaluation of the Final Tender;

**Data room** means the secure electronic data storage room that will be provided via Conject;

**DCN** means the Department of Clinical Neurosciences currently provided from the Western General Hospital on Crewe Road South, Edinburgh;

**Dialogue** means the competitive dialogue conducted in accordance with the Regulations;

**Dialogue Meeting** means a meeting between the Board and a Bidder during the Dialogue Period;

**Dialogue Period** means the period between the date of issue of the ITPD and the date of issue of the notification from the Board that Dialogue has been concluded;

**Dialogue Period Bulletin** means a communication during the Dialogue Period of that name described in paragraph 4.11.2 (Communication Protocol) of Volume 1 of the ITPD;

**Dialogue Period Query** means a communication during the Dialogue Period of that name described in paragraph 4.11.2 (Communication Protocol) of Volume 1 of the ITPD;

**Draft Final Tender** means the submission made by a Bidder during the Dialogue Period in accordance with Appendices A, B and C of Volume 1 of the ITPD;

**Draft Schedule of Accommodation** has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ITPD;

**Enabling Works** has the meaning given to it in paragraph 2.7.5 (Enabling Works) of Volume 1 of the ITPD;

**Economic Cost** has the meaning defined in paragraph 5.7.1 (Economic Cost) of Volume 1 of the ITPD:

**Energy Centre** means a dedicated autonomous energy centre to be provided as part of the Project;

**Expiry Date** has the meaning given to it in the NPD Project Agreement;

**Environmental Matrix** means the matrix contained in ITPD Volume 3, Schedule Part 6, Section 3, Appendix C;

**Equalisation Adjustment** has the meaning described at paragraph 5.7.1 (c) (Economic Cost) of Volume 1 of the ITPD;

**Equipment Schedule** means the document named such in Volume 3 of the ITPD;

**Equipment Responsibility Matrix** means the document named such in Volume 3 of the ITPD;

**Facilities** has the meaning given to it in the NPD Project Agreement;

**Family Hotel** has the meaning given to it in Schedule Part 6, Section 3, Sub-section D (Specific Clinical Requirements);

FOISA has the meaning given to it in the NPD Project Agreement;

Full Business Case or FBC means full business case of the Board;

Financial Close has the meaning given to it in the NPD Project Agreement;

**Financial Model** means an electronic model used for the purposes of this procurement as produced by a Bidder in support of the Bidder's Financial Submission (or by the Board in the case of the Shadow Bid Financial Model), having the attributes defined at paragraph 3.9 of this document:

**Financial Proformas** means the contents of Annex 1 to Appendix B of Volume 1 of the ITPD:

**Financial Submission** means the elements of a Bidders proposals relating to financial issues as defined in Appendix B of Volume 1 of the ITPD and as relating to the Final Tender, Draft Final Tender and all other submissions required during the Dialogue Period;

**Final Tender** means a submission made by a Bidder in response to an Invitation to Submit Final Tender;

**Final Tender Period** means the period between the date of issue of the notification that Dialogue has been concluded and the date of the Final Tender;

**Generic Rooms** has the meaning given to it in paragraph 2.5.2 (Room Layouts) of Volume 1 of the ITPD:

**GICs** means guaranteed investment certificates

Group 1 Equipment has the meaning given to it in the NPD Project Agreement;

Group 2A Equipment has the meaning given to it in the NPD Project Agreement;

Group 2B Equipment has the meaning given to it in the NPD Project Agreement;

Group 3 Equipment has the meaning given to it in the NPD Project Agreement;

**Gross Internal Floor Area** means the area of a building measured to the internal face of the perimeter walls at each floor level. The rules of measurement of gross internal floor area are defined in the latest edition of the RICS Code of Measuring Practice;

**Hard FM** has the meaning given to it in paragraph 2.11 (Facilities Management: Services to be provided by Project Co) of Volume 1 of the ITPD;

**Helpdesk** has the meaning given to it in the Service Level Specification contained in Volume 3 of the ITPD. ;

**Indicative Elements of the Reference Design** has the meaning given to it in paragraph 2.6 (Indicative Elements of the Reference Design) of Volume 1 of the ITPD;

**Informal Submission** has the meaning given in paragraph 4.2.3 (Timetable and Dialogue Meetings) of Volume 1 of the ITPD;

**Information Provided** means the information provided to the Bidders by the Board or its advisers during the Dialogue Period;

Interface Proposals has the meaning given to it in the NPD Project Agreement;

**Invitation to Participate in Dialogue or ITPD** means this document as more particularly described in paragraph 1.2.1 of Volume 1 of the ITPD as updated by the Board from time to time:

**Invitation to Submit Final Tender or ISFT** means the document(s) which may be issued by the Board to any shortlisted Bidders inviting them to submit their Final Tender;

IRR means internal rate of return;

**Key Rooms** has the meaning given to it in paragraph 2.5.2 (Rooms Layouts) of Volume 1 of the ITPD;

**Key Stage Review** the validation to be carried out by the Scottish Futures Trust on behalf of the Scottish Government at key stages of the procurement process;

**Link Building** has the meaning given to it in the NPD Project Agreement;

**Mandatory Reference Design Requirements** has the meaning given to it in paragraph 2.5 (Reference Design and Mandatory Reference Design Requirements) of Volume 1 of the ITPD;

**Medical School** means the University of Edinburgh Medical School, Chancellor's Building, 49 Little France Crescent, Edinburgh, EH16 4SB;

MLA means mandatory liquid assets;

**NPD** means non-profit distributing;

**NPD Articles of Association** means the mandatory articles of association of Project Co, which are prescribed by the SFT;

**NPD Model** means the non-profit distributing model ascribed by the Scottish Government which represents a development of the traditional PFI model;

**NPD Project Agreement** means the contract set out in draft form at Volume 2 of the ITPD as updated from time to time and issued to all Bidders who remain in Dialogue with the Board at the relevant time;

**NPV** means net present value;

**OBC** means Outline Business Case of the Board relating to the Project;

#### **Operational Functionality** means

(a) the following matters as shown on the 1:500 scale development control plan and site plans;

- (i) the point of access to and within the Site and the Facilities:
- (ii) the relationship between one or more buildings that comprise the Facilities; and
- (iii) the adjacencies between different hospital departments within the Facilities,

as indicated in the Reference Design;

- (b) the following matters as shown on the 1:200 scale plans:
  - (i) the points of access to and within the Site and the Facilities;
  - (ii) the relationship between one or more buildings that comprise the Facilities;
  - (iii) the adjacencies between different hospital departments within the Facilities; and
  - (iv) the adjacencies between rooms within the hospital departments within the Facilities,

as indicated in the Reference Design;

- (c) the quantity, description and areas (in square metres) and minimum critical dimensions of those rooms and spaces shown on the Draft Schedule of Accommodation, excluding Project Co spaces;
- (d) the location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans and internal elevations; and
- the location of and the inter-relationships between rooms within the departments within the Facilities, as indicated in the Reference Design;

but only insofar as each of the matters listed in (a) to (e) above relate to or affect Operational Use (with the exception of Non-Clinical Services);

**Operational Use** means the use of a room or space to the extent that it is used by the Board or its employees, tenants, agents and/or contractors (but not to avoid doubt Project Co staff) for carrying out the Board Services;

Payment Mechanism has the meaning given to it in the NPD Project Agreement;

**Non-Clinical Services** has the meaning given to it in the NPD Project Agreement;

**NPD Project Agreement Submission** has the meaning given to it in Appendix C(i) of Volume 1 of the ITPD;

**Plan 2** has the meaning given to it in the NPD Project Agreement;

Plan 4 has the meaning given to it in the NPD Project Agreement;

**Planning Permission in Principle or PPiP** means planning permission in principle granted to the Board by CEC in relation to the Site;

**Preferred Bidder** means the Bidder identified by the Board after evaluation of each of the Final Tenders with which the Board wishes to enter into the NPD Project Agreement;

**Pre-Qualification Questionnaire** means the document of that name issued on 5 December 2012;

**Price Evaluation** means the process set out in paragraph 5.7 (Price Evaluation) of Volume 1 of the ITPD:

**Price Evaluation Mark** has the meaning given to it in paragraph 5.7.2 (Price Evaluation Mark) of Volume 1 of the ITPD;

**Project** has the meaning given to it in the NPD Project Agreement;

**Public Interest Director** has the meaning given to it in paragraph 3.2.1(b) (Public Interest Director) of Volume 1 of the ITPD;

**Quality Evaluation Mark** has the meaning given to it in paragraph 5.6 (Quality Evaluation Criteria) of Volume 1 of the ITPD;

**Query Proformas** means the document provided within Appendix D of Volume 1 of the ITPD;

**Reference Design** means the preliminary designs prepared by the Board and their advisers and contained in the Data Room;

**Reference Design Elements** means the documents referred to within Appendix E of Volume 1 of the ITPD;

**Reference Design Schedule of Accommodation** has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ITPD

Regulations mean The Public Contracts (Scotland) Regulations 2012;

RIE Facilities has the meaning given to it in the NPD Project Agreement;

RIE Project Agreement has the meaning given to it in the NPD Project Agreement;

Royal Hospital for Sick Children and Department of Clinical Neurosciences means the premises and associated infrastructure proposed to be constructed as part of the Project and includes CAMHS;

**RHSC** means the Royal Hospital for Sick Children currently located at 9 Sciennes Road, Edinburgh EH9 1LF;

**Schedule of Accommodation** has the meaning given to it in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation) of Volume 1 of the ITPD;

**Schedule of Operational/Design Notes** means document contained in Volume 4 of the ITPD (Data Room);

Service Strip has the meaning given to it in the NPD Project Agreement;

**SFT** means the Scottish Futures Trust;

**SFTs Standard Form NPD Project Agreement** means the form of project agreement issued by SFT on in June 2012, and as amended by SFT from time to time;

**Site Survey** means the survey of the Site to be procured by the Board and set out in paragraph 2.16 (Surveys and Dialogue Period Ground Investigations);

**Soft FM Interface Specification** means the specification contained in Volume 3 of the ITPD, Part 6, Section 3;

**Solution** means a solution developed by each Bidder in regard to the Project during the Dialogue Period;

**Submission** means either or all of the Informal Submission, Draft Final Tender and/or Final Tender where the context requires

**Surplus** has the meaning given to it in the NPD Project Agreement;

**Technical Cost Proformas** means the proformas included in Annex 1 to Appendix A of Volume 1 of the ITPD;

**Tender Period** means either the Dialogue Period or any Final Tender Period;

**User Guide** means the SFT user guide in relation to standard project agreements (hub DBFM and NPD Model); version 2 dated June 2012 as amended from time to time;

VAT means value added tax;

**VFM** means value for money;

VIE means vacuum insulated evaporator.

#### 1.4 Overview of Project

The Project shall be to design, build, finance and maintain a new facility to re-provide services from the Royal Hospital for Sick Children, Child and Adolescent Mental Health Service and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France

In accordance with the Scottish Government's NPD initiative, the Board is now seeking to procure through Dialogue a partner who will form a NPD company (the "**Project Co**") for the delivery of the Project.

The Project shall be based at the Campus Site. The Campus Site shall comprise the Retained Site (i.e. the site of the existing hospital and university buildings) and the Site (i.e. the site for the new Facilities) together with the Retained Estate (i.e. the existing hospital and university buildings) and the Facilities (i.e. the new hospital). The Retained Estate and Retained Site form part of an earlier PFI project entered into between the Board and Consort in 1998. Consort therefore operate (on behalf of the Board) the Retained Estate and the Retained Site.

The intention is that the Project shall construct standalone Facilities on the Site within the Campus Site at Little France as far as is practically possible. However, there shall be a physical link between the Facilities and the Retained Estate via a Link Building between the Facilities and the RIE Facilities at ground and first floor levels.

The Project will co-locate services currently provided at the RHSC located at Sciennes Road, Edinburgh, CAMHS at the Royal Edinburgh Hospital and DCN at the Western General Hospital, Edinburgh. Planning Permission in Principle has been received in respect of the Project.

This Project is regulated and governed by the Public Contracts (Scotland) Regulations 2012 and any contract awarded shall be to the Bidder who can offer the most economically advantageous tender in accordance with the Dialogue procedure.

#### 1.5 Project Objectives and Drivers

**1.5.1** The Board has developed a strategic clinical framework to underpin its approach to delivering Scotland's vision for sustainable, quality health care services and a healthier future for everyone.

The framework sets out the Board's principles for planning and delivering services and care in Lothian, and identifies how, through integrated working with partners and redesigning service around and with people, the Board will promote good health and deliver safer, more effective, person-centre healthcare.

The key principles are to:

- focus on prevention and early intervention to help people keep well and anticipate care needs;
- take a whole system approach to planning and managing integrated pathways of care, working with partner agencies in local authorities and voluntary sector;
- reduce unnecessary variation in the way patients are cared for;
- deliver services with the appropriate mix of staff skills, ensuring viable clinical staff rotas;
- reduce spend on property and buildings as hospital stays reduce, to release money for direct patient services;
- · question active treatment which will not extend life or quality of life;
- identify services that are not sustainable in the longer term and proactively plan a new way of delivering care;
- make sure we stop procedures and treatments which add no clinical value; and
- maximise the opportunities for use of new technologies to support health and healthcare.

The framework focuses on six strategic aims:

- 1. prioritise prevention, reduce inequalities and promote longer healthier lives for all;
- 2. put in place robust systems to deliver the best model of integrated care for our population across primary, secondary and social care;
- 3. ensure that care is evidence based, incorporates best practice and innovation, and achieves sustainable care pathways for patients;

- 4. design healthcare systems to reliably and efficiently deliver the right care at the right time in the most appropriate setting;
- 5. involve patients and carers as equal partners, enabling individuals to manage their own health and wellbeing and that of their families; and
- 6. use resources skilled people, technology, buildings and equipment efficiently and effectively.
- **1.5.2** The Board is committed to increasing social capital and addressing inequalities, deriving benefit for the communities, such as through proactive application of community benefits clauses in its procurement processes.
- **1.5.3** Specific factors driving the need for change in children's and young people's services and clinical neurosciences are:
  - (a) The age and limitations of the current premises;
  - (b) The increase in age range of patients to be seen in the facility, up to age 16 years old, or 18 in some specialities.
  - (c) The need to deliver sustainable specialist services whilst meeting the challenge of relatively small numbers of patients and small numbers of clinical experts;
  - (d) The national policy for Paediatric Intensive Care Units in Scotland, which have been commissioned under NHS National Services since 2007, sited in two hospitals for children and young people;
  - (e) The need to deliver neurosurgery on the same site as adult and children's emergency departments; and
  - (f) The need to maintain strong links with the University of Edinburgh's Division of Clinical Neuroscience and their planned Institute of Neuroscience at Little France.
- **1.5.4** Clinical benefits of integrating the services into one building, supporting the Board's and national strategic ambitions include:
  - (a) The ability to deliver paediatric and adult neurosurgery in the same theatre suite, maximising the utilisation of specialist equipment (e.g. intra-operative MRI) and expert staff, with direct internal access to age-appropriate critical care and wards;
  - (b) Mental health services on the same site as acute hospital services for children and young people, supporting their physical as well as psychological care;
  - (c) Joint-working and economies of scale in high-cost specialist clinical areas such as theatres and radiology; and
  - (d) The opportunity to improve emergency access to services by incorporating a helipad on the roof of the Facilities.

## 1.6 Project Governance

- **1.6.1** The terminology used to describe project governance arrangements is as defined by the "Scottish Capital Investment Manual Programme and Project Organisation Guide".
- **1.6.2** The Investment Decision-Maker is Lothian Health Board, which is ultimately accountable for the Project.
- **1.6.3** The Board's Finance and Resources Committee (F&RC) has established a Project Steering Board, chaired by the Project Owner, who is NHS Lothian's Director of Finance.
- 1.6.4 The F&RC routinely receives minutes of the Project Steering Board. The Project Owner shall provide assurance to the F&RC on key aspects of project governance and internal control, and progress reports on the delivery of key project milestones.

- **1.6.5** The Project Owner shall alert the F&RC in the event of any trend towards cost escalation or delay, or any radical changes to the objectives of the Project. The Project Owner shall make recommendations to the F&RC on action to take in these circumstances.
- **1.6.6** The Project Owner has the executive responsibility for decision-making relating to the project. All decisions must be consistent with Board strategies, policies and procedures and delegated budgets or in line with any agreed derogations.
- **1.6.7** The Project Director has responsibility for delivering the project within the governance parameters set out.
- **1.6.8** Project Steering Board remit shall be:
  - To assist the Project Owner and Project Director in the decision-making process for issues relating to the Project;
  - To support the Project Owner and Project Director in preparing submissions to the F&RC, to satisfy that Committee's assurance needs on governance and internal control and monitoring of key performance milestones;
  - To serve as the Capital Management Group, with delegated authority to approve capital
    enabling works for the Project up to £250k, and will be the first place to review schemes
    higher than £250k; and
  - To be the arbiter of matters arising from the implementation of the Project Design and the Strategic Delivery Programme.
- **1.6.9** Project Steering Board Membership:
  - Project Owner (chair)
  - Project Director
  - Medical Director
  - Non-executive member(s) of Lothian NHS Board
  - A representative from the service
  - Project Clinical Director
  - Director of Capital Planning and Projects
  - Associate Director of Finance
  - Project Operational Lead
  - Communications Manager
  - A representative from the Lothian Partnership Forum
  - A representative from the South-East & Tayside Regional Planning Group (SEAT)
  - A representative from the Scottish Government
  - A representative from the Scottish Futures Trust
- 1.6.10 The Project Owner, as chair of the Project Steering Board, shall decide whether a meeting should proceed in the event of absence of any members. The Project Owner may designate a member to chair a Project Steering Board meeting in their absence. However if the Project Steering Board is considering any business in its capacity as a Capital Management Group then the quorum is the Project Owner plus one member of Lothian Health Board, or if the Project Owner is not present, two members of Lothian Health Board.
- **1.6.11** The Project Director is supported by a project team comprising clinical experts and experienced NHS managers from capital planning, service management, finance and communications. Staff representation is fully integrated into the project with a full-time Partnership member of the team.

- **1.6.12** The Board's team are supplemented by specialist expertise from external financial, legal and technical advisers.
- **1.6.13** A Project Management Executive supports the Project Director in the day to day running of the Project and reporting on progress to the Project Steering Board.

## 1.7 Programme

The following table sets out the key target milestones for the Project.

Task	Date
Issue Invitation To Participate In Dialogue	12/03/13
Briefing Meetings	w/c18/03/13
Board to propose draft Site Survey	22/03/13
Bidders to provide comments in relation to draft Site Survey	05/04/13
Dialogue Meeting 1	w/c 01/04/13
Dialogue Meeting 2	w/c 29/04/13
Dialogue Meeting 3	w/c 27/05/13
Dialogue Meeting 4	w/c 24/06/13
Dialogue Meeting 5	w/c 22/07/13
Draft Final Tender submission	26/08/13
Dialogue Meeting 6	w/c 23/09/13
Close dialogue	30/09/13
Invitation to Submit Final Tenders	11/10/13
Final Tender submission	11/11/13
Identify Preferred Bidder	13/01/14
Commercial and Financial Close	07/08/14
Construction commences	18/08/14
Completion date (target)	17/03/17
Hospital opening date	15/05/17

#### 2 TECHNICAL OVERVIEW

#### 2.1 Introduction

This section provides an overview of the technical requirements of the Project. In relation to all technical information provided by the Board, the Board reserves the right to amend all such information during the course of the Dialogue Period, including without limitation the Mandatory Reference Design Requirements, Board's Construction Requirements and Equipment provisions.

#### 2.2 The Site

The planned location for the new Facilities is at Little France, in the south east of Edinburgh, home to the RIE Facilities and the University of Edinburgh Medical School and adjacent to the Edinburgh Bioquarter Site development.

The site is bounded on the north by the Medical School, on the east by the RIE Facilities, to the south by existing commercial and residential buildings on Old Dalkeith Road and to the west by the Queen's Medical Research Institute and the main entrance road serving the Campus Site at Little France.

Also to the west of the Campus Site is an area of rising ground which slopes up to Craigmillar Castle. The view from the south-east over the site to the castle, with Arthur's Seat in the distance, is considered by City of Edinburgh Council (CEC) to be an important view on the southern approach to the city. The Site of the new Facilities is wholly within the red line boundary set out in Plan 1.

#### 2.2.1 The Royal Infirmary of Edinburgh

The RIE Facilities is a major acute teaching hospital and has more than 900 inpatient beds. As described above the RIE Facilities were procured under a PFI contract between the Board and Consort in 1998 and was opened in 2003.

It is home to Scotland's busiest maternity unit – some 6000 babies are born at the RIE Facilities' "Simpson Centre for Reproductive Health" each year – and to Scotland's busiest emergency department.

With a 24-hour emergency department, it provides a wide range of acute medical and surgical services for patients from across the Lothian region and specialist services for people throughout the south east of Scotland and beyond.

## 2.2.2 University of Edinburgh

The Chancellor's Building, adjoining the RIE Facilities, is part of the University of Edinburgh Medical School and houses teaching facilities, the medical library and research laboratories. It is currently home to the Multiple Sclerosis and Euan MacDonald Motor Neurone Disease research centres. The Chancellor's Building was constructed by Consort under the terms of the RIE Project Agreement.

The University opened its Queen's Medical Research Institute in 2005 which represented a major milestone in the history of biomedical research in Edinburgh. The Queen's Medical Research Institute houses over 600 researchers and aims to tackle a wide range of diseases at the most fundamental cellular level. Facilities include MRI and other modern imaging technologies and supporting infrastructure.

The University's Scottish Centre for Regenerative Medicine was opened in the Edinburgh Bioquarter Site in 2011. The Anne Rowling Building is the most recent addition to the University's facilities and lies between the Chancellor's Building and the site proposed for the new Facilities

## 2.3 Stand Alone Requirements

Subject to Clause 9 (Nature of Land Interests) including without limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement, Appendix A of the Board's Construction Requirements and/or the Interface Proposals all buildings, facilities, services and associated works required to deliver the Project shall be contained within the Facilities and/or the Site and shall not be reliant upon any other buildings, facilities or services on the Retained Facilities and/or Retained Site (the "Stand Alone Requirements"). For the avoidance of doubt the following dedicated and autonomous elements shall be provided on the Site as part of the Project;

- (a) an Energy Centre;
- (b) the FM goods service yard; and
- (c) Hard FM spaces.

#### 2.4 Design and construction elements

#### 2.4.1 Overview

The specific requirements for the Facilities to be provided are set out in the Board's Construction Requirements. This comprises: -

- General Requirements;
- Specific Clinical Requirements; and
- Specific Non-Clinical Requirements.

The Board's Construction Requirements are set out in Section 3 of Volume 3 of the ITPD and will ultimately form Section 3 of Schedule Part 6 (Board's Construction Requirements) of the NPD Project Agreement.

Using the work undertaken to date, the Board is seeking innovative proposals to meet its requirements.

The focus must be on providing age appropriate Facilities in a safe, caring and healing environment. This includes suitable Facilities for babies and young children, an adolescent inpatients zone, and accommodation for the adult population of DCN.

Areas for children, young people and adults should have their own identity within the integrated Facilities. At all times, the ethos, environment and needs of these different specialist areas has been considered in planning departmental relationships and patient pathways and this must be maintained.

Effective delivery of clinical services relies on close adjacencies between related specialties and disciplines. The design brief specifies that routes between departments should minimise travel time and distances for patients and staff in order to maximise clinical safety and efficiency.

The design will incorporate clearly identifiable, friendly and secure children's entrances to their outpatient and ward areas. There will be a separate main entrance to the DCN facilities. Recreation space and public facilities outside the wards will also be segregated as far as is practical.

The Board welcomes and will encourage Bidders to bring innovation, and expertise from within the UK and/or overseas to develop their own design proposals but it should be noted that certain elements of the design as they relate to aspects of Operational Functionality are mandatory, as described below and in Appendix E (Reference Design Elements) of Volume 1 of the ITPD.

#### 2.4.2 Facilities to be provided

Facilities required for the Project include:

- (a) inpatient wards;
- (b) day case facilities;
- (c) outpatient clinics;
- (d) emergency department;
- (e) operating theatres;
- (f) radiology and physiology departments;
- (g) rehabilitation facilities;
- (h) support department;
- (i) roof top helipad; and
- (j) dedicated energy centre and goods delivery yard.

## 2.5 Reference Design and Mandatory Reference Design Requirements

The use of Reference Design in NPD projects is being promoted by the SFT and the Scottish Government.

A Reference Design for the Project has been developed and comprises mandatory elements and indicative elements.

The mandatory elements of the Reference Design (the "Mandatory Reference Design Requirements" are those elements of the Reference Design relating to Operational Functionality. The definition used in the NPD Project Agreement is being applied to define the agreed Operational Functionality included in the Reference Design and is generally set out in the following constituents of the Reference Design:

- 1:500 Departmental Adjacency Layouts;
- 1:200 Departmental Layouts; and
- 1:50 Generic and Key Room Layouts.

Other areas of Operational Functionality are contained in other components within the Reference Design. Full details of the Mandatory Reference Design Requirements are set out in Appendix E (Reference Design Elements).

Bidders are required to develop design proposals which comply with the Mandatory Reference Design Requirements.

For the avoidance of doubt, the Board will not enter into any Dialogue on alternative solutions to the Mandatory Reference Design Requirements. Bidders' proposals must be developed to comply with these Mandatory Reference Design Requirements. Bidders will be fully responsible for all elements of the design and construction of the Facilities including being responsible for verifying and satisfying themselves that the Mandatory Reference Design Requirements can be designed, built, and operated to meet the Board's Construction Requirements.

Following completion of the Reference Design some further adjustments were developed by the Board. These are set out in the Schedule of Proposed Adjustments contained in Volume 4 of the ITPD. Bidders are expected to address these adjustments during the Dialogue Period and incorporate them with their Final Tender. Bidders are required to provide a full breakdown of all costs (capex and opex) relating to item U1 "RHSC Specialist Paediatric Biochemistry Laboratory" included in the schedule.

#### 2.5.1 Schedule of Accommodation and Reference Design Schedule of Accommodation

A schedule of accommodation has been developed by the Board to meet their requirements (the "**Draft Schedule of Accommodation**"). While the Draft Schedule of Accommodation is not mandatory in itself, the areas set out within it are considered to be minimum areas. These minimum areas will only apply to elements which affect the Operational Functionality and Non-Clinical Services areas. Areas such as service spaces (including risers) and Hard FM spaces will be for the Bidders to determine since responsibility and risk for these non operational spaces will ultimately rest with Project Co.

A further schedule of accommodation is included as part of the Reference Design; this has been developed based on the room areas achieved, as drawn, in the Reference Design (the "Reference Design Schedule of Accommodation"). Bidders are required to meet the minimum floor areas specified in the Draft Schedule of Accommodation however the Reference Design Schedule of Accommodation contains rooms where the area is less than the minimum requirements set out in the Draft Schedule of Accommodation. If Bidders cannot achieve the minimum floor areas for these rooms then it is acceptable, subject to agreement with the Board, for the rooms to be provided at the size achieved in the Reference Design. For the avoidance of doubt this will only apply to those individual rooms and not rooms of the same type or designation. Bidders will be expected to develop a schedule of accommodation which will form part of their proposals (the "Schedule of Accommodation").

Circulation and communication space indicated in the Reference Design is also considered to be indicative but any corridor widths specified will be treated as minimum requirements. This is also outlined paragraph 5.10 (Corridor Widths and Heights) of the Board's Construction Requirements. Therefore minimum corridor widths set out in the Reference Design are considered to be Mandatory Reference Design Requirements.

Any courtyards and terrace spaces are to be treated as communications spaces. These should be indicated on the Schedule of Accommodation submitted by Bidders but excluded from the measure of Gross Internal Floor Area.

#### 2.5.2 Room Layouts

The 1:50 layout drawings included in the Reference Design cover the generic and key rooms only. Generic rooms are those rooms that are replicated more than four times across the Facilities ("Generic Room"). Key rooms are those that have critical operational requirements which the Board has identified for more detailed consideration and development at this early stage ("Key Room"). These include major spaces in the emergency department, operating theatre, radiology and outpatients departments. There are:

- 1839 rooms in total:
- 222 are covered under 88 Key Room types; and
- 756 are covered by 31 Generic Room types.

The Reference Design is developed in full at 1:500 and 1:200 scales. At 1:50 scale, where individual room layouts are detailed, the coverage is 53% of the total number of rooms (equating to 43% of the net floor area).

During Dialogue Bidders will be required to develop 1:50 layout drawings for the rooms identified in the table below which will form part of their proposals.

Table: 1:50 Layout Drawings to provided by the Bidders			
Room Reference	Room Designation	Department	
G - A1 - 028/029	Resuscitation Bay	Emergency Department	
G - E1 - 001	The Pod/Multi-functional activity zone	Outpatient Area	
G - D2 - 013	Lung Function Laboratory	Cardiology and Respiratory	
1 - D6 - 053-4	Rehabilitation Rooms	Therapies	
1 – J1 – 003	Body Viewing	Bereavement Suite	
2 - R1 - 001-055	All	Clinical Management Suite	
3 – H3 – 001	Workshop/Tutorial 3	Clinical Education Suite	
3 - C1.1 - 042	Clean Utility	Medical In-patients	
4 – H1 – 018	Molecular Biology Laboratory	Child Life and Health	
4 – H1 – 027	Physiological Laboratory	Child Life and Health	
4 – H1 – 016	Tissue Culture Store	Child Life and Health	

The Preferred Bidder will be required to develop 1:50 layout drawings for all remaining rooms prior to Financial Close.

#### 2.5.3 Room Data Sheets

Standard format Room Data Sheets have not been prepared by the Board for the Project. The specific room requirements (the "Room Information") are detailed in a combination of the following documents:

- The Board's Construction Requirements;
- The Environmental Matrix;
- The Schedule of Operational/Design Notes;
- The Equipment Schedule;
- The Equipment Responsibility Matrix;
- The Draft Schedule of Accommodation; and
- The Operational Functionality elements of the Reference Design.

During Dialogue Bidders will be required to develop Room Data Sheets, incorporating the Room Information, for those rooms for which 1:50 layout drawings have been prepared. For the avoidance of doubt this shall include all Key Rooms and Generic Rooms in addition to those rooms identified in the table at paragraph 2.5.2 above. The Room Data Sheets will form part of the Bidders proposals. The Preferred Bidder will be required to complete Room Data Sheets for all remaining rooms prior to Financial Close.

## 2.6 Indicative Elements of the Reference Design

During the preparation of the Mandatory Reference Design Requirements, other information has been generated both as a by-product of preparing the Reference Design itself and as a general Project requirement as follows:

- (i) FM goods handling and distribution;
- (ii) Structural engineering solutions;
- (iii) Building services engineering solutions;
- (iv) Servicing strategies and space allocations; and
- (v) Hard FM solutions and space allocations.

This constitutes the "Indicative Elements of the Reference Design".

Such information is issued to the Bidders for "information only" so that they may understand the intent of the Reference Design. Bidders must however refer to the Board's Construction Requirements for the detailed requirements for all such Indicative Elements of the Reference Design for which they will ultimately carry the risk. Bidders are advised that the Board's Construction Requirements will always take precedence over the Reference Design for matters which do not define Operational Functionality. The full distinction between Mandatory Reference Design Requirements and Indicative Elements of the Reference Design are set out in Appendix E (Reference Design Elements).

#### 2.7 Interface and Enabling Works

#### Introduction

The section is an overview of:

- 1. General background and information about the Works see paragraph 2.7.1;
- 2. Works to be designed, constructed and replaced, repaired, renewed and maintained by Project Co as part of the Project. Sometimes these works are on the Site or on the RIE Site or Campus Site or even off the Campus Site see paragraphs 2.7.2 and 2.7.3;
- 3. Works to be designed and constructed by Project Co as part of the Project but not intended to be replaced, repaired, renewed and maintained by Project Co see paragraph 2.7.4;
- 4. Works which are being carried out by others and not intended to form part of the Project but are taking place at the Campus Site or off the Campus Site but which are nevertheless pertinent to the operations at the Campus Site as a whole see paragraph 2.7.5;

#### 2.7.1 General information relevant to the Works

The permanent and temporary Works and all construction operations for the Project should, save where expressly provided otherwise, generally be designed and constructed to enable them to be carried out and where appropriate replaced, repaired, renewed and maintained on and from within the Site.

The Site is part of the Campus Site and Project Co has to be aware of and plan and programme the Works having regard to the other activities and operations ongoing at the Campus Site.

At some points it may be necessary temporarily for Project Co to enter or have access across other parts of the Campus Site for construction activities and the Board has secured a number of rights for Project Co in respect of such other parts of the Campus Site.

As well as operations on the Site, Project Co will be entitled to use Car Park E for a site compound during the Construction Phase for the Works, subject to a number of restrictions on use as detailed

in Section 3 (Site Compound/Car Park E) of Appendix A of the Board's Construction Requirements and Clause 9 (Nature of Land Interests) including with limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement. Further, in the event any activities on the Site involve oversailing any part of the Retained Site and/or the Retained Facilities then Project Co will require to develop an Oversail Strategy as detailed in Section 4 (Oversail) of Appendix A of the Board's Construction Requirements.

Where any construction and/or replacement, repair, renewal or maintenance activities are permitted at the Campus Site but off the Site then these activities are restricted to and must be carried out in accordance with the rights secured for such activities which rights are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement and such rights are subject to a number of conditions being met which conditions are further detailed in Appendix A (Interface with Campus Site and/or Campus Facilities) of the Board's Construction Requirements. Further restrictions on conditions and other information governing design, construction and replacement, repair, renewal and maintenance activities are detailed in the Board's Construction Requirements and Services Requirements.

Please also refer to the Interface Proposals which require to be developed by Bidders during the Dialogue Period.

#### 2.7.2 Links with RIE

#### (a) Link Building

As set out in paragraph 2.3 (Stand Alone Requirements) the new Facilities shall be delivered as a standalone new build. However, the Facilities will be physically linked to the RIE Facilities at ground and first floor levels. The part of the RIE Facilities to which the Facilities will be linked is called the Link Building.

The Link Building is being constructed as part of the key enabling works described in paragraph 2.7.5 (Enabling Works). Its construction is not intended to be part of the Project and it is intended to be completed prior to the Works commencing on Site. The Link Building shall ensure improved clinical functionality and service delivery, particularly between the emergency departments, operating theatres and critical care departments in the RIE Facilities and the Facilities. Project Co will be responsible for designing and constructing the Facilities to physically link to the RIE Facilities at the Link Building interface point as set out in Appendix B (Interface Output Specification) of the Board's Construction Requirements.

## (b) RIE Works within the Campus Site but outside the Site boundary and maintained by Project Co

There shall also be building services links between the new Facilities and the RIE Facilities in respect of building services and other connections in terms of: -

- infrastructure associated with ICT;
- a pneumatic tube system (PTS);
- · fire alarm system; and
- foul drainage connections.

A new PTS will be designed and built which will run from the Facilities to the pharmacy and laboratories within the RIE Facilities. An ICT system will be designed and built which will run from the Facilities to link to the Board's ICT equipment/systems within the RIE Facilities. The Board will

advise Project Co of the route for the PTS and ICT within the RIE Facilities. The Board will procure that Project Co will be given access to the RIE Facilities for the installation of the PTS and ICT and Project Co will be responsible for replacing, repairing, renewing and maintaining the PTS and ICT which have been installed as part of the Works. The Board will procure access for constructing, replacing, repairing, renewing and maintaining, PTS and ICT within the RIE Facilities, such rights of access are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement but are subject to design, construction and other information being provided to and approved by the Board and Consort about the PTS and ICT systems as detailed in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of Appendix A. For more information about these systems please also see sections Appendix A of the Board's Construction Requirements.

The fire system for the Facilities will have to be designed and constructed and replaced, repaired, renewed and maintained such that they will be connected to, communicate and operate with the fire system at RIE Facilities. It is envisaged that such connections and a control box will be proximate to or within the Link Building. The rights to make and replace, repair, renew and maintain such connections are subject to design, construction and other information being provided to and approved by the Board and Consort about the fire system for the Facilities as detailed in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix A. For more information about these systems please also see paragraph 4 of the Board's Construction Requirements.

#### (c) Service Strip / Foul Drainage

There may also be connections into some existing infrastructure for foul drainage. If Project Co requires to connect the foul drainage systems for the Facilities into the existing foul and surface water drainage systems for RIE Facilities then foul drainage systems must be designed and constructed by Project Co such that they may be connected to foul drainage systems only at the agreed connection points in the Initial Drainage Proposal or within the Foul Service Strip shown shaded yellow and hatched black on Plan 2A serving the RIE Facilities. The Board will procure that Project Co will be given access to specified places and connections points on the RIE Site. Project Co will be responsible for replacing, repairing, renewing and maintaining the foul drainage systems serving the Facilities and the connections. The Board will procure access for Project Co constructing, replacing, repairing, renewing and maintaining the foul drainage systems serving the Facilities and connections as are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement, but are subject to design, construction and other information being provided to and approved by the Board and Consort about the foul drainage systems serving the Facilities as detailed in Section 6 (Service Strip and foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix A. For more information about these systems please also see paragraphs 4, 6 and 8 of the Board's Construction Requirements and the Initial Drainage Proposal

A list of Interface Proposals from Bidders is required during Dialogue for those elements of the new Facility which may have to interface with the existing RIE Facilities and infrastructure serving RIE. These are detailed in Appendix A of the Board's Construction Requirements and summarised in Appendix C (iv) (Interface Proposals) of Volume 1 of the ITPD.

As regards design and construction of any electrical, gas and water connections there must all be independent services serving the Facilities and are not intended to connect into any such services serving RIE Facilities or the rest of the Campus Site and/or Campus Facilities. However wherever any such services have to be installed on the RIE Site, the locations for such services are restricted to certain areas, including the Service Strip which is shown shaded yellow and hatched black on Plan 2. Project Co will be responsible for design and construction and replacing, repairing, renewing and maintaining such services serving the Facilities. The Board will procure for Project Co access

for such rights of access for constructing replacing, repairing, renewing and maintaining such services as are detailed in Section 3 (Ancillary Rights) of Schedule Part 5 (Land Matters) of the NPD Project Agreement but are subject to design, construction and other information being provided to and approved by the Board and Consort about the services as detailed in Section 6 (Service Strip and Foul Service Strip) of Part 1 of Appendix A of the Board's Construction Requirements and other applicable provisions of such Appendix and for more information about these systems please also see paragraphs 4, 6 and 8 of the Board's Construction Requirements.

#### 2.7.3 Other Works outside Campus Site

The Board has identified other works (the Off Site Works on the Bioquarter Site) which will be required to be carried out, by Project Co, outwith the Campus Site. This may include the provision of a dedicated Scottish Power Substation for the Project which may be located adjacent to Car Park F at the Campus Site in the area outlined in blue on Plan 4 although Project Co is invited to suggest alternative locations for any suitable power source outwith the Campus Site. If required, access to the Substation, if constructed adjacent to Car Park F detailed above, for construction and ongoing maintenance may be via the area shaded blue and hatched black on Plan 4. The cable route to the Facilities will be agreed with the Board and may enter the Site via the Service Strip (shown shaded yellow and hatched in black on Plan 2) and the cable route may not cross the RIE Site at any other point.

#### 2.7.4 Retained Estate Handback Infrastructure

The Board has identified the following RIE Works which will be required to be carried out on the Campus Site but outwith the Site boundary. These works shall result in the Retained Estate Handback Infrastructure and shall be Works carried out by Project Co but upon completion will not be maintained by Project Co but by or on behalf of the Board by or on behalf of Consort. These Works include the design and construction of:

- (a) Hospital Square Infrastructure;
- (b) Cycle Path Infrastructure; and
- (c) Drainage Infrastructure.

The Retained Estate Handback Infrastructure is more fully described in paragraph 4 of the Board's Construction Requirements.

#### 2.7.5 Enabling Works

#### (a) RIE Enabling Works

The Board has identified the following enabling works (the "RIE Enabling Works") which will be required to be carried out on the Campus Site to meet planning requirements for the Project. These key enabling works will be carried out by or on behalf of the Board by or on behalf of Consort. These works are not intended to form part of the Project and it is intended they are completed or substantially completed prior to any part of the Works commencing on Site. The key enabling works are described here for information purposes only.

(i) Flood Protection Works: which means the enhancement of existing flood protection measures at the Campus Site;

- (ii) Road Infrastructure Works: which means changes to the road and transport infrastructure at the Campus Site, including but not limited to the creation of a public transport terminus to the east of RIE Facilities, new bus stances and revision of existing car parking;
- (iii) VIE Relocation Works: which means relocation of the existing VIE plant serving RIE Facilities to another location on the RIE Site. Separate VIE plant is required for the Facilities;
- (iv) Link Building Works: which means the building which is to be part of RIE Facilities to which the new Facilities will be connected at ground and first floor levels described in paragraph 2.7.1(a) above;
- (v) Service Diversion Works: which means the diversion of certain services such as electricity, water, gas, that serve RIE Facilities and are currently located on under or over the Site to positions outwith the Site to new positions within the RIE Site. However Project Co should note that not all redundant services are being removed and grubbing up of any diverted and redundant services will be the responsibility of Project Co as part of the Works. For the avoidance of doubt there shall be no diversion of the County sewer, the crèche's sewer and connection, the crèche's storm water sewer which it is believed run under the Site;
- (vi) Sewer Diversion Works: which means the diversion of trunk sewers currently located in the Site to positions outwith the Site to new positions within the RIE Site;
- (vii) Clinical Facilities: Reconfiguration/alteration of a number of clinical facilities within RIE Facilities: and
- (viii) Way Finding: which means the installation of new comprehensive way-finding measures across the Campus at Little France (new signage and directional indicators as necessary).

#### (b) Flood Works

Off-Site Flood Protection Works – It is proposed to construct flood defence walls (approximately 1000mm high) to both sides of the Niddrie Burn in the Nether Craigour area upstream of the Old Dalkeith Road bridge to provide improved flood protection to the Campus Site. These works will be procured under a separate contract and do not form part of the Project.

#### 2.8 BREEAM

Bidder's designs must achieve, as minimum, a "Very Good" BREEAM rating in line with the requirements for healthcare facilities as set out in the BREEAM Scheme Document for New Construction (SD5073) 2011. The designs must also achieve a minimum of 6 credits ("Excellent" rating) in accordance with the BREEAM Scheme Document for New Construction (SD5073) Section 6.0 ENE1.

#### 2.9 Sustainable Design and Quality

Bidders are required to promote sustainable development by demonstrating an integrated approach to the social, environmental and economic well-being of the area served, now and for future generations. The Facilities will reflect the objectives of any local agenda strategy supported by the CEC and also satisfy the requirements of all health and social care guidance notes, as set out in Board's Construction Requirements associated with sustainability and environmental performance.

#### 2.10 Community Benefits

The Board recognises the importance of sustaining the community and delivering against social considerations. As well as providing significant training and employment opportunities for the full Project Term, the Project also has the potential to drive significant initiatives relating to regeneration, sustainability and social benefits, aligning with the Board's strategic objectives.

Community Benefits clauses set out within Clause 73 (Community Benefits) of the NPD Project Agreement support this agenda. Provisions relevant to training and appropriate measures regarding supply chain contracts and engagement with small and medium sized enterprises and supported businesses are recognised as examples of the elements that may be taken into account.

Project Co will work in partnership with the Board and where appropriate, the Edinburgh Partnership and the agencies listed in paragraph 3.6 of Appendix I to deliver the Board's requirements in respect of both the Construction Phase and Operational Term of the Project.

Please refer to Appendix I and section B6 of Appendix A(ii) of Volume 1 of the ITPD which set out the Board's approach to social considerations/Community Benefits and how Bidder proposals in these areas will be taken into account.

#### 2.11 Facilities Management - Services to be provided by Project Co

The interface of facilities management (FM) services provided across the Campus Site will be addressed through the Little France Campus Working Group.

Project Co will be required to provide the Services which shall be a proactive facilities management and lifecycle replacement service. The key elements of the Services shall include, but not be limited to:

- Contract management;
- Performance management and monitoring via a helpdesk facility;
- Programmed ,maintenance and unprogrammed maintenance work of the mechanical, electrical and building fabric components of the Facilities;
- Procurement and management of Utilities;
- Lifecycle replacement of the mechanical, electrical and building fabric components of the Facilities, including all floor coverings;
- Hard landscaping maintenance;
- External façade cleaning / window cleaning; and
- Periodic cleaning of vents, extractors and luminaires.

For the avoidance of doubt, Bidders should note that the following items are excluded from the Services and will be delivered by the Board (or third party providers):

- Portable Appliance Testing; and
- Redecoration of walls and ceilings.

The detailed requirements for above are set out in Volume 3 of the ITPD and will ultimately become Schedule Part 12 (Service Requirements) of the NPD Project Agreement.

#### 2.12 Services to be provided by the Board

Delivery of all Clinical Services in the Facilities will be the responsibility of the Board.

It is anticipated that soft FM services will be provided by a combination of the Board and third party providers contracted with the Board. There will be a number of operational interfaces not only with the Board's team but also the FM staff working within the RIE Facilities and so Project Co shall be required to adopt a collaborative approach to interfaces so that hard and soft facilities services are provided by Project Co, the Board and the RIE FM team effectively and in adherence with Board policies. Key to the success of that relationship will be the quality of the team and clarity of the agreement between the parties.

To assist Bidders in developing their proposals and understanding the interfaces with the Board and third party providers, information on the Board's proposed delivery strategies has been provided within Schedule Part 6 (Board's Construction Requirements), section 3, Sub-section E (Specific Non-Clinical Requirements) of the NPD Project Agreement covering items such as but not limited to:

- Linen Services;
- Waste Management/ Disposal;
- Materials Management;
- Portering Services;
- Catering Services;
- Routine, Periodic and Specialist cleaning;
- · Domestic Services; and
- Delivery Area.

In addition the Board will be responsible for the maintenance and lifecycle replacement of Equipment that the Board is responsible for as set out in paragraph 2.15 (Equipment) and the Board Services.

#### 2.13 ICT

The Project includes the design, construction and maintenance of comprehensive and robust infrastructure (e.g. containment, cabling and node rooms) for the Facilities in accordance with the requirements of the Board's Construction Requirements.

The Board will install hardware (e.g. servers, PCs, printers, scanners), make the final connections (at the application and in computer rooms) and commission the operational system. Future management of the telephone system and IT helpdesk will not form part of Project Co's scope of the Services. Instead, the telephone system and switchboard will be managed by the Board. The IT helpdesk service will also be provided by the Board.

A responsibility matrix relating to the ICT installations is contained in the Board's Construction Requirements.

#### 2.14 Retail opportunities

The provision of catering and retail services within the Facilities does not form part of the Project. Catering and retail services shall be provided by the Board and associated parties (such as voluntary and/ or charitable organisations). These will be part of the Board Services.

#### 2.15 Equipment

#### 2.15.1 Equipment documentation

The following documents are contained within Volume 3 of the ITPD, which outline the Board's requirements in relation to Equipment and associated responsibilities:

- (a) Equipment Schedule which shows all Equipment (Group 1, Group 2A, Group 2B and Group 3) which will be installed or anticipated to be installed in the Facilities presented on a room by room basis; and
- (b) Equipment Responsibility Matrix which shows for each different item of Equipment, the split of responsibilities between Project Co and the Board.

### 2.15.2 Groups of Equipment

Equipment included for the Project will include new equipment replacement, transfer and fit out of existing equipment, upgrade of existing equipment and new equipment included in developments.

## (a) Group 1 Equipment

This is Equipment fixed to the building fabric (including fixed furniture e.g. cabinets, boards, blinds, brackets, shelves, TV brackets and illuminators) and/or attached to, or forming part of the building services (e.g. sanitary ware, sockets, outlets IT and medical, theatre lights, luminaries and pendants etc).

Project Co will generally be responsible for all Group 1 Equipment including specification, procurement, installation, maintenance and Lifecycle Replacement. However, the Board shall specify the details (both quantities and specification) for certain key items of Group 1 Equipment which are more clinical in nature (e.g. pendants in theatres and critical care).

The quantities specified for Group 1 Equipment in the Equipment Schedule are considered to be indicative by the Board. However, such quantities of Group 1 Equipment represent the minimum quantities acceptable to the Board. The exception to this are those items of Group 1 Equipment which the Board wish to specify – these are identified on the Equipment Schedule and will be considered to be mandatory.

## (b) Group 2A Equipment

Project Co will only be responsible for the installation of Group 2A Equipment (and the installation of the replacement equipment at lifecycle intervals). The Board will be responsible for all other aspects of Group 2A Equipment (such as specification, procurement, maintenance and Lifecycle Replacement). Project Co will be responsible for designing Facilities which allow the Board to carry out their obligations in relation to Group 2A Equipment (including operation).

#### (c) Group 2B and Group 3 Equipment

The Board will be wholly responsible for all Group 2B and Group 3 Equipment including specification, procurement, installation, maintenance and Lifecycle Replacement. Project Co will not be responsible for any aspect of Group 2B or Group 3 Equipment however will be responsible for designing Facilities which allow the Board to carry out their obligations in relation to Group 2B and Group 3 Equipment (including operation).

Equipment included for the Project will include new Equipment replacement, transfer and fit out of existing equipment, upgrade of existing Equipment and new Equipment included in developments.

## 2.16 Surveys and Dialogue Period Ground Investigations

The ground investigation surveys which have been carried out to date are summarised in Volume 4 Data Room Contents. Warranties are not provided for these surveys.

The Board intends to procure a Site Survey which shall be made available to all Bidders. Bidders shall be invited to review and comment on a draft scope for the Site Survey. Bidders shall be required to submit their comments within the timescale set out in paragraph 1.7 (Programme) of Volume 1 of the ITPD. When the scope is agreed, the Board shall instruct the Site Survey, incorporating any agreed Bidder comments in accordance with paragraph 1.7 (Programme) of Volume 1 of the ITPD.

The Board shall not warrant this Site Survey. However, the Board shall procure that the party engaged to carry out the Site Survey provides a reliance letter to the Preferred Bidder in respect of the Site Survey.

#### 2.17 Planning

An application for Planning Permission in Principle (PPiP) for the "erection of a Children's Hospital, including Department for Clinical Neurosciences (DCN) and ancillary facilities, helipad, associated enabling development including energy centre, Vacuum Insulated Evaporator (VIE), car parking, revised access and public transport arrangements, public realm works and landscaping, (car parking, access and public transport arrangements in detail)" at Edinburgh Royal Infirmary, 51 Little France Crescent, Edinburgh, EH16 4SA was submitted to the CEC on the 29th July 2011.

The application (Reference 11/02454/PPP) was approved by CEC on 5th April 2012, subject to a number of conditions, and the conclusion of a Section 75 legal agreement.

The application was supported by a suite of information including a Design and Access Statement, which included the principles of design, sustainability, scale and massing. The application was also accompanied by an Environmental Statement in accordance with the Town and Country Planning (Environmental Impact Assessment) (Scotland) Regulations2011.

A subsequent stand alone permission (Reference 12/00479/FUL) was granted by CEC on 4 June 2012, for development of revised public access and revised public transport arrangements, associated car park remodelling, public realm works and landscaping. This followed the conclusion of a separate Section 75 legal agreement.

Various background papers relating to the application for PPiP and the application for Planning Permission, including Section 75 legal agreements are available within the Data Room.

In order to efficiently manage the pre-application consultation process for the approval of the detailed scheme, the Board and their representatives will agree a schedule of meetings with CEC Planning and Building Standards at which Bidders will be required to present their proposals and discuss planning and related issues. Any such meetings will be coordinated by the Board and their representatives and will be attended by the Board's representatives as appropriate. The details for these meetings will be agreed with each of the Bidders early in the dialogue process. No direct contact should be made with the CEC Planning and Building Standards, unless first agreed with the Board.

Other stakeholders, including Historic Scotland, Scottish Natural Heritage and Architecture and Design Scotland, will also be invited to be involved in this pre-planning process, to assist the Board in reviewing and assessing the Submissions.

The Preferred Bidder, once appointed, will be responsible for obtaining approval of the detailed scheme, in compliance with the conditions of the PPiP. This will require approval of matters specified in conditions. This will be required prior to Financial Close. The Board expects Bidders to

have satisfied themselves before submitting their Solutions that their proposals will secure detailed planning consent.

#### 2.18 Artwork

The integration of art into the architecture and landscape to enhance the hospital environment is an essential requirement of the design. The Board welcomes innovative proposals for interactive art and wayfinding throughout the Facilities. Project Co will appoint artists to work with the Board on developing an arts strategy for the Project. Project Co shall carefully consider the arts strategy for the Board, including artworks and artefacts from the existing buildings that have been identified for transfer, and outputs from the 2010-2014 charitably funded Artists in Residence Programme within the RHSC and CAMHS.

The Board will be responsible for approving the whole art content in the Project and Project Co shall engage the Board fully in this process before any art work is commissioned.

## 2.19 Family Hotel

The Family Hotel is to provide "home away from home" accommodation for the families of children receiving in patient care in hospital. This accommodation is free of charge to families at the point of delivery, and aims to provide a supportive environment, and enable the whole family to be able to spend time together and close to their sick child.

It will provide overnight accommodation for families as well as facilities for parents whose children are resident on the wards, as outlined in the Specific Clinical Requirements section K2 (Family Hotel).

## 2.20 Achieving Excellence Design Evaluation Toolkit (AEDET)

An initial AEDET assessment has been carried out on the Reference Design which can be found in the Data Room. During Dialogue it is the intention of the Board to carry out further AEDET assessments using the information provided by the Bidders. The AEDET assessment will be undertaken by the Board with the key project stakeholders. The AEDET reviews will not be evaluated but the outcome of the process will be passed back to the Bidders during the Dialogue prior to Dialogue Meeting five, purely as an informative tool to assist Bidders develop their proposals. Bidders are, however, reminded that their proposals shall ultimately be evaluated by the Board in accordance with paragraph 5 (Tender Evaluation and Contract Award Criteria) of Volume 1 of the ITPD.

#### 3 COMMERCIAL OVERVIEW

#### 3.1 Introduction

This section provides an overview of the commercial aspects of the Project.

#### 3.2 NPD Structure

The Project will be delivered using the Scottish Government's NPD Model. The NPD Model was developed and introduced as an alternative to, and has since superseded, the traditional private finance initiative or "PFI" model in Scotland. It has been used in the education (schools) and health sectors. The NPD Model has been fine-tuned since it was first introduced and this section summarises the basic principles that will underpin the NPD Model as it will apply to the Project.

The NPD Model is defined by three core principles:

- Enhanced stakeholder involvement in the management of projects;
- No dividend bearing equity; and
- · Capped private sector returns.

Projects funded using NPD Model principles will pay a fixed return to the holders of the junior or risk-bearing debt of the Project Co. All other distributions to equity (i.e. the holders of the shares and junior debt of the Project Co) will be prohibited. Surpluses arising after satisfying all precedent lines in the cash cascade, subject to any agreed buffer, will be payable to the Board as a rebate against unitary charge service payments. In this way, returns to investors are capped at the level bid during the procurement process.

Although contractors and funders are expected to earn a normal market rate of return as in any other form of privately-finance PPP deal, the NPD Model seeks to eliminate uncapped equity returns associated with the traditional PFI model and limit these returns to a reasonable rate set in competition.

#### 3.2.1 Key features of the NPD Model:

These key features include:

- (a) Corporate structure: The Board will contract with a special purpose vehicle (referred to in the NPD Project Agreement as "Project Co") which will be majority owned and controlled by the private sector investors. The Board will own a "golden share" in the Project Co which gives it certain controls over the corporate, governance and management structures within the Project Co. Project Co's articles of association must incorporate the mandatory NPD articles, produced by the SFT, that enshrine the fundamental principles of the NPD Model;
- (b) Public Interest Director: One of the Project Co's directors will be nominated by the SFT and will bring an independent voice to Project Co's board and shall ensure a greater degree of transparency and accountability to stakeholders (the "Public Interest Director");
- (c) Refinancing: Under the NPD Model the Public Interest Director has the right to instigate a refinancing on the same basis as the Board may instigate a refinancing under SoPC4 guidance;

- (d) Capped Returns: This shall ensure that a "normal" level of investment return is made by the private sector and that these returns are transparent;
- (e) Surpluses: Surpluses generated by Project Co shall be reinvested in the public sector; and
- **(f) Transparency:** The public interest shall be represented in the governance of the NPD structure, which increases transparency and accountability and facilitates a more proactive and stable partnership between public and private sector parties.

SFT has provided a suite of contractual documents, comprising a NPD Project Agreement and articles that will be adopted for use in this Project, appropriately amended for project and NHS-specific issues. These are included at Volume 2 of the ITPD.

Further information on the NPD Model is available from the SFT website: www.scottishfuturestrust.org.uk.

#### 3.2.2 Benefits of NPD Model

The NPD Model retains the benefits of traditional PFI structures, such as:

- (a) optimum risk allocation;
- (b) whole-life costing;
- (c) maximised design efficiencies;
- (d) robust programming of lifecycle maintenance and facilities management;
- (e) performance-based payments to the private sector;
- (f) single point delivery system, reducing interface risk for the public sector client; and
- (g) improved service provision.

Also produces additional benefits, as set out in paragraph 3.2.1 above.

#### 3.3 Overview of NPD Project Agreement

The NPD Project Agreement reflects the SFT's Standard Form NPD Project Agreement, with additional project specific amendments which have been agreed by SFT. In terms of these project specific amendments, please refer to paragraph 3.6 (Project Specific Changes) below. The NPD Project Agreement and its schedules shall regulate the relationship between the Board and Project Co.

The Board expects Bidders to accept the positions within the NPD Project Agreement which reflect the SFT's Standard Form Project Agreement. However, the Board acknowledges that the project specific amendments to the NPD Project Agreement may be amendments worthy of discussion between the Board and Bidders. Bidders are requested to raise all comments (including all Subcontractor comments and/or anticipated Senior Funder comments) in relation to the NPD Project Agreement prior to Dialogue Meeting 3 and, if accepted by the Board and SFT (pursuant to the derogations process), such comments may form part of the relevant Submissions.

The SFT's Standard Form NPD Project Agreement is derived from other standard documentation in use in PFI projects; in particular SoPC4 and the Scottish Standard Health PPP Contract, therefore its principles will be familiar to those actively involved in the PPP market.

## 3.4 General Approach in relation to NPD Project Agreement

The Preferred Bidder will be expected to enter into the NPD Project Agreement with the Board in the form of the draft NPD Project Agreement set out in Volume 2 of the ITPD with the exception of any agreed derogations sanctioned by the Board and SFT.

In terms of the Dialogue, all matters relating to the NPD Project Agreement should be raised by Bidders, their Sub-contractors and/or their potential Funders during the Dialogue Period. Depending on the approach to funding adopted for Final Tender, as set out in paragraph 3.8.6 (Due Diligence) an appropriate level of due diligence on behalf of Funders should be carried out during the Dialogue Period. Only matters in relation to fine tuning and clarification of the NPD Project Agreement shall be addressed once the Dialogue Period has closed. Other than fine tuning and clarification issues, any issues which are not raised during the Dialogue Period will not be considered by the Board after the Dialogue Period has closed.

The Board will also require the Direct Agreements to be substantially in the form set out in the draft NPD Project Agreement

To the extent that Bidders, their potential Funders, diligence teams and/or Sub-contractors have concerns about the terms of the draft NPD Project Agreement or any of the other key project documents including the Ancillary Agreements, these must be raised with the Board prior to the start of Dialogue Meeting 3.

# 3.5 Derogation Procedure

The Board has agreed with SFT the required project/sector specific changes to the SFT's Standard Form NPD Project Agreement prior to issue of the ITPD. Thereafter, any further changes proposed to the NPD Project Agreement by Bidders during the Dialogue Period will, if acceptable to the Board, require SFT's approval through a derogation procedure to be managed by the Board. The Board and SFT's expectation is that any such derogations will be minimal. The Board will engage with the SFT on project/sector specific changes throughout the Dialogue Period, and will aim to provide feedback to Bidders on proposed amendments as soon as possible. A final decision on all Bidders amendments to the NPD Project Agreement shall be reached between the Board and SFT, and communicated to the relevant Bidders, prior to close of the Dialogue Period.

#### 3.6 Project Specific Changes to NPD Project Agreement

**3.6.1** A number of project/sector specific amendments have been agreed with SFT and are set out in the NPD Project Agreement.

The key project specific amendments include:

a) **Lifecycle** Additional lifecycle drafting has been added at Clause 23A (Lifecycle Replacement) of the NPD Project Agreement to provide the Board with greater visibility in terms of lifecycle replacement.

b) **TUPE**The Board does not envisage that the Transfer of Undertaking (Protection of Employment) Regulations 2006 (TUPE) will apply to the Project or to any current Board staff. SFT's alternative drafting set out in Form 2 of Appendix 2 of the User Guide has therefore been added at Clause 25 (No Employee Transfer) of the NPD Project Agreement. In addition, Clause 26 (Pensions) of the NPD

Project Agreement has been deleted.

# c) Board's right to stop Project Operations

In terms of Clause 13A, a new clause has been added permitting the Board to instruct Project Co to stop performing the Project Operations in the event of a (i) Stop Incident; (ii) potential impact upon Clinical Services, and/or (iii) the occurrence of a Major Incident. In terms of (ii) and (iii) a Compensation Event shall be available to Project Co if the Board instructs stopping the Project Operations on one of these grounds. In terms of (i), the consequences of this Board instruction shall be treated in a similar way to Clause 13 in relation to opening up of the Works.

#### d) Indemnities

Additional limbs of the indemnity have been added in relation to breach of the Interface Proposals and/or breach of Appendix A of the Board's Construction Requirements and a breach of certain Reserved Rights. These are project specific requirements of the Board and primarily relate to Site issues which may have a wider impact upon the operation of the Campus Site.

#### e) Insurance

The Board has undertaken a review of the insurable and uninsurable risks that may emanate from the Project. The insurance provisions and minimum requirements have been set out in Clause 53 (Insurance) and Schedule Part 15 (Insurance Requirements) of the NPD Project. In addition, waiver of subrogation option has been added at Clause 53.6 (Subrogation and Vitiation) of the NPD Project Agreement. Bidders shall be required to price this option as part of its Draft Final Tender and Final Tender as indicated in Financial Proformas 1a and 4.

# f) Community Benefits

SFT's drafting set out in Form 5 (Community Benefits) of the User Guide has been added at Clause 73 (Community Benefits) of the NPD Project Agreement (see 2.10, Appendix I and section B6 of Appendix A(ii) for further detail on how the Board is taking social considerations/Community Benefits into account in this procurement.

## g) Interface

(i) Interface: Appendix A of the Board's Construction Requirements sets out the specific interface issues between the Facilities and the Retained Estate. Appendix A of the Board's Construction Requirements also requires Bidders to prepare certain Interface Proposals to address these specific interface issues.

- (ii) Interface Proposals: The Interface Proposals shall include Bidder's proposals relating to construction access, operational access, oversail strategy, access areas strategy, drainage and substation proposals, service strip and foul service strip proposals and connection to the Link Building proposals. These Interface Proposals shall form part of Bidders Submissions and shall also form part of both the Draft Final Tender and Final Tender. The requirements for the Interface Proposals are more fully described in Appendix A of the Board's Construction Requirements, but shall be subject to conditions set out in Schedule Part 5 (Land Matters) of the NPD Project Agreement. However, for ease of reference, a list of Interface Proposals has been set out in Appendix C (iv) (Interface Proposals) of Volume 1 of the ITPD.
- (iii) Little France Campus Working Group: The Board has established a Little France Campus Working Group in which Project Co will be required participate in. The purpose of this group is to support all parties on the Campus Site in order that they can work in partnership to deliver their responsibilities under Health and Safety legislation and the Construction (Design and Management) Regulations 2007 to ensure the safety of patients, staff and visitors and the operation of services on the Campus Site.

# h) Payment Mechanism

The NPD Project Agreement schedule has been amended to reflect the acute healthcare nature of the accommodation and incorporates the use of sessions as opposed to days as an element of the deduction formula for unavailability, in addition to the application of a gearing mechanism to the derivation of Service Unit values.

## 3.7 Articles of Association

Project Co will be a private company limited by shares with the Articles of Association contained in Volume 2 of the ITPD which sets out the mandatory NPD provisions including membership of Project Co, the rights of the members, voting rights and controls on how revenue is to be used.

# 3.8 Financial Aspects of the Project

In this Section, the ITPD sets out the following:

- (a) key financial aspects of the Project that the Board considers to be of fundamental importance;
- (b) financial assumptions to be made by bidders;
- (c) submission requirements at each stage; and
- (d) the process by which financial evaluation of Final Tenders will take place.

#### 3.8.1 Affordability

The Board has developed a shadow bid Financial Model that produces an Annual Service Payment as derived from technical cost inputs that reflect the Reference Design and a set of assumptions

that reflects current economic factors and funding market conditions. This model has been used to ensure that the Project is affordable to the Board.

The Board will be responsible for meeting the proportion of the Annual Service Payment related to Hard Facilities Management (Hard FM) services and 50% of the lifecycle maintenance expenditure. The Scottish Government will meet the remaining proportion of the Annual Service Payment via revenue support.

Bidders should note that Scottish Government revenue support for a proportion of the Annual Service Payment is capped in relation to the construction cost of the Project. The construction cost cap will include all construction related costs, including design fees. It has been set at an uninflated amount of £137,757,000 (based on a 3Q 2011 base date) plus an inflation allowance calculated by reference to the BCIS All-in Tender Price Index from the base date of 3Q 2011 to the index forecast at the assumed construction mid-point of 4Q 2015. The indices at 18 February 2013 are 3Q2011 (final) 220 and 4Q 2015 (forecast) 237 giving a current inflation allowance of £10,645,000 and a total current construction cap of £148,402,000. All figures are net of VAT.

The construction cap supported by the Scottish Government will be adjusted during the Dialogue Period to reflect changes in BCIS All-in Tender Price Index for the forecast of the index at 4Q 2015 and bidders are expected to monitor movements in the index for the purposes of formulating their proposals. The Board will advise bidders in the ISFT of the level of Scottish Government's cap as at that date based on the most recently published BCIS Index forecast and it will be fixed at that date. In the shadow bid Financial Model, the Board has assumed Hard FM and Life Cycle Costs of £29 per m2 and £27 per m2 respectively, at current prices.

The Board will be responsible for meeting other costs such as soft facilities management services, utility costs and rates.

The Board reserves the right to set aside any Bid that exceeds the construction cap, except where the Board has specifically agreed that a higher construction cost is acceptable.

#### 3.8.2 Value for Money

It is essential that the Board can demonstrate that the Project remains value for money throughout the procurement process. Provision of revenue support by the Scottish Government will be dependent upon the Board being able to demonstrate to the SFT and Scottish Government that Bidder proposals are based on costs that are competitive and represent value for money. The Board is also required to submit a Full Business Case to the Scottish Government prior to Financial Close. This needs to clearly demonstrate that the Project will deliver value for money and will be affordable to the Board over the duration of the contract. The Full Business Case requires to be approved by the Scottish Government to allow the Project to proceed.

## 3.8.3 Funding Approach

Due to the current volatility of the funding market, the Board has devised an approach to the funding elements of Bidders' solutions that provides for the flexibility required to allow Bidders to respond to developments in the market as Dialogue progresses. This approach is set out below.

#### **Submissions Prior to Final Tender**

It is the Board's intention to devise and issue a standard term sheet containing funding terms relevant in the current funding market that Bidders should use in developing the financial elements of the Draft Final Tender and any relevant financial submissions required during the Dialogue

Period. This standard term sheet will be issued no later than three weeks before any relevant submission date.

# **Final Tender Stage**

At the Final Tender stage the Board reserves the right to request either:

- a) A Fully Funded Solution that covers the full duration of the NPD Project Agreement. In this option, it would be the Bidder's responsibility to identify and propose a form of funding for the Project that is both deliverable and offers the best possible Value for Money to the Board. Should Bidders consider that this is not achievable this must be discussed during Dialogue. In preparing Final Tenders on this basis, Bidders should clearly demonstrate to the Board that a competitive process has been undertaken in order to identify the preferred funder and/or chosen funding route, and that funder due diligence has been completed. The pricing developed will be evaluated to determine whether a funding competition will be required at Preferred Bidder stage; or
- b) A solution based on a **Standard Term Sheet** to be issued by the Board should this prove to be preferable based on prevailing market conditions at that time. Should this option be pursued Bidders would be required in any case to have engaged diligence teams on behalf of potential funders, whose reports would be included within the Final Tender submissions. Once a Preferred Bidder is appointed a funding competition would be carried out to identify the preferred funding solution.

The Board will inform Bidders of the preferred option at the earliest possible opportunity during Dialogue.

Bidders should note that as a condition of Scottish Government support for the project the Board reserves the right to instruct a funding competition at any point during the procurement.

Bidders are also reminded that the Scottish Government reserves the right to consider alternative funding, financing and / or contractual arrangements to support the delivery of the project. The Board will provide updates to Bidders during dialogue should any such alternatives emerge.

## 3.8.4 Funder Commitment and Exclusivity

Bidders are required to demonstrate the strongest possible evidence of funder support for the proposals contained in the Final Tender. The Final Tender should include the provision of term sheets and letters of support as necessary and as specified in Appendix B. A clear statement on the level of internal approval that the project has received from the respective lending organisations should be made. In addition the details of any further approvals that would be required prior to Financial Close should be fully disclosed.

The Board requires that Bidders do not appoint funders on an exclusive basis during the Dialogue Period. During the Dialogue Period, Bidders will be required to confirm that no exclusivity arrangements have been signed with their potential funders. Failure to adhere to this requirement may result in the down-selection of that Bidder. Advice as to exclusivity in the Final Tender period will be provided during the Dialogue Period.

#### 3.8.5 European Investment Bank Involvement

Bidders should note that initial discussions have taken place with the European Investment Bank (EIB) regarding their potential involvement in the Project. The potential involvement of EIB will be discussed with Bidders during the Dialogue Period.

## 3.8.6 Due Diligence

By Final Tender, Bidders are required to demonstrate that a detailed due diligence over their submission has been carried out on behalf of Funders or potential Funders. At that stage the Board will require assurances that the Funders have been involved in the due diligence process and fully support the submission.

Bidders are encouraged to progress their due diligence at the earliest opportunity.

#### 3.8.7 Surpluses

In developing the Project the Board has assumed no prescribed levels of Surpluses are required to be paid during the concession period. Bidders should assume that any and all Surpluses that are generated will be paid to the Board as a rebate against the Annual Service Payment. Any Surpluses produced by a Bidder's Financial Model will be included in the evaluation of price by applying 7% nominal discount rate in calculating the NPV of such Surpluses. Bidders should note that this discount rate is higher than that which will be used to evaluate the Annual Service Payment (6.09%). This approach reflects the Board's preference for a lower and certain Annual Service Payment as opposed to an equivalent and less certain Surplus.

Any Surpluses forecast in Bidders' Financial Models should reflect the level of cash buffer that has been bid (see below) and the full impact of the funding terms being used for Final Tenders, as these will affect the likelihood and timing of Surplus Payments actually being made to the Board. Evaluation strategies should allow for risk adjustment of forecast Surpluses where appropriate.

#### 3.8.8 Cash Buffer

Bidders may retain a cash buffer (over and above Funders' reserves and covenants) in their Financial Models in order to deal with unexpected events that arise during the Project. Surpluses are required to be paid out only to the extent that these exceed the cash buffer. The cash buffer should be set at a level that is no higher than two months' worth of the indexing element of the monthly Annual Service Payment. The cash buffer itself should index. Bidders are free to propose a lower level of cash buffer, as this will allow an earlier release of surpluses which will be evaluated more favourably through the NPV calculation described above.

Bidders' Financial Submissions should clearly identify Surpluses available for distribution to the Board. Such Surpluses should be defined as:

- (a) any Surpluses bid and included in the Financial Model over the operational period, including the period post repayment of debt;
- (b) positive cash balances forecast in the Financial Model at the Expiry Date;
- (c) any Debt Service Reserve Account (DSRA) or Maintenance Reserve Account (MRA) balance released on repayment of debt (if not used to retire debt).

Payments of Surpluses to the Board should be assumed to take place on the last day of the relevant accounting period applicable.

#### 3.8.9 Interest Rate Risk

The Scottish Government will take the risk of changes in the reference interest rate (e.g., the underlying London Interbank Borrowing Rate (LIBOR) rate) up to Financial Close subject to approval and conditions of the FBC.

## 3.8.10 Foreign Exchange Risk

The Board will not accept any foreign exchange risk. Such risks should be absorbed entirely by Bidders.

## 3.8.11 Third party income

The Board does not anticipate that any third party income will be available within the Project and none should be assumed within Financial Submissions.

## 3.8.12 Capital and charitable contributions

The Board does not intend to inject any capital contributions into the project at this time. However, The Board wishes to reserve the right to make such an injection should this prove practical and desirable at a later point in the Dialogue Period.

It is likely, however, that charities associated with the Board will wish to make a charitable contribution to the Project. This may take a number of forms:

- (a) A contribution in the form a lump sum payment to cover the cost of construction of specific areas within the building that the charity wishes to support, such as the Family Hotel. For the avoidance of doubt, such areas are already included within the Service Level Specification and Reference Design and will form part of the new Facilities and Services whether or not a charitable contribution is made.
- (b) A donation that will allow the specification of certain areas in the new Facilities to be enhanced over and above the level of Board's requirements currently contained within Volume 3 of the ITPD. Should such a donation be forthcoming, the Board would seek to amend the Board's requirements as required.
- (c) A donation that funds the purchase of specific assets such as equipment or artwork.

At present, the size and nature of such contributions is not known. Where the value and timings of such contributions has an impact upon the level of borrowing that Bidders will require at Financial Close, the Board is to provide a firm commitment of the injection of these contributions to all Bidders prior to close of Dialogue so that Final Tenders and Financial Models can be prepared on the correct basis.

#### 3.8.13 Indexation

The Annual Service Payment will be indexed on an annual basis. The Payment Mechanism contains the formula for applying the inflation adjustment. Bidders should note that the affordability assessment assumes that approximately 20% of Annual Service Payment payments are subject to indexation in line with the cost inputs used in the shadow bid Financial Model.

The Board does not expect that a Bidder's funding solution will require the use of RPI hedging instruments. Any relevant financial submissions should clearly demonstrate the proportion of costs that are fixed and the proportion subject to inflation. Bidders should set a rate of Annual Service Payment indexation that creates a natural hedge position given their cost structure. Bidders are required to develop their proposals on the basis of the use this natural hedge and to provide inflation sensitivities that demonstrate this as set out in the Financial Proformas contained in Annex 1 to Appendix B.

# 3.8.14 Validity of Submission

Bidders are required to price their Submissions anticipating a Financial Close of 7 August 2014. Bidders are required to maintain underlying construction, operating, FM and Project Co's costs for a period of three months from the target Financial Close date with no adjustment for inflation, meaning that should Financial Close be reached prior to 7 Nov 2014, the bid price will not be adjusted for the effects of inflation.

Bidders are also obliged to use all reasonable endeavours to mitigate the impact of any cost increases post validity period.

Bidders must specify which cost index or indices they require costs to be inflated in the post validity period.

## 3.8.15 Pass Through Costs

The Board will retain price risk associated with the defined pass through costs, those being insurance, rates and utility costs, as set out in the NPD Project Agreement. However, Bidders should note that the Board will review such costs in each Bidder's solution and allow for these in the Equalisation Adjustment (see below) as part of the Price Evaluation process. Financial Pro-forma 1a should be used to set out the pass-through costs proposed by the Bidder.

## 3.8.16 Accounting and Tax Treatments

Bidders are required to satisfy themselves generally as to their own tax position under existing tax legislation, including any issues surrounding IFRS, the application of any capital allowances and revenue relief against corporation tax and the treatment of Surplus payments. All assumptions in respect of tax and accounting should be set out clearly in the Financial Model.

Bidders will be required to demonstrate within their Submissions that the most beneficial treatments have been adopted and that the Board has received the full benefit thereof by way of reduced Annual Service Payment. It is anticipated that a composite trade tax treatment will produce the lowest Annual Service Payment and, based upon this assumption, the NPD Project Agreement will be drafted accordingly. If Bidders can demonstrate a more beneficial tax and accounting treatment they should advise what changes would be required to the NPD Project Agreement to accommodate the alternative approach.

## 3.9 Financial Model

### 3.9.1 Key assumptions

Bidders are requested to note the following assumptions within their Financial Models, in addition to those noted in Section 3.8 above:

(a) For the purposes of their Submission, Bidders will be provided with a LIBOR swap rate assumption no later than three weeks before the submission date of any relevant

Submissions. Should a Bidder elect to provide a capital market solution, the Board will provide an appropriate reference rate on the same timescale.

- (b) RPI should be assumed as 2.5%.
- (c) The Financial Model should be prepared in accordance with UK GAAP or IFRS.
- (d) The date of Financial Close should be assumed to be 7 August 2014.
- (e) The Financial Model should cover an operational period of twenty-five (25) years plus the construction period, with each year end assumed to be 31 March.
- (f) The discount rate to be used in calculating all NPV figures should be 3.5% real and 6.0875% nominal.
- (g) All costs in the Financial Model should assume a price base date as at Financial Close with a first indexation point of the 1 April subsequent to Financial Close.
- (h) The Bidders NPV calculation should discount cash flows back to the base date as at Financial Close.
- (i) Annual Service Payment payments should assume 100% performance.
- (j) Cash flows should be assumed to occur at the midpoint of each semi-annual period.
- (k) Surpluses are as defined in Section 3.8.6 and should be treated as indicated.
- (I) Public Interest Director fees are to be included in the financial submission of £15,000 per annum, subject to indexation.
- (m) Construction insurance costs are to be included within the Financial Model.
- (n) Pass-through costs (operational insurance costs, utilities costs and rates) are to be excluded from the Financial Model but should be shown separately within the Bidder's Financial Submission in Financial Proforma 1a. In the case of energy costs, Bidders should use the input unit price assumptions provided in the Proforma to generate the pass through cost, based on the projected energy usage inherent in the Bidder's proposals. All such passthrough costs will be evaluated as part of the Equalisation Adjustment.
- (o) All assets will revert to the Board on expiry for nil consideration.
- (p) No third party income should be included in the Financial Model.
- (q) No capital contributions should be assumed unless otherwise informed.

#### 3.9.2 Financial model format

Bidders must submit financial projections for each year of the NPD Project Agreement in the form of a computer Financial Model, which will become the Financial Model as defined in the Draft NPD Project Agreement.

The Financial Model must adhere to the following requirements:

(a) The Financial Model must be prepared using Microsoft Excel (2003 or later);

- (b) The Financial Model should be free of error, including circular references or hard-coded values in non-input areas;
- (c) The Financial Model should be transparent, with the logic of all calculations capable of being followed through the model, with no hidden macros or password protected areas;
- (d) Financial projections should be presented on a monthly basis during the construction period and on a semi annual basis during operations (for each period ending 30 September and 31 March);
- (e) All values should be expressed in £ sterling and to £'000's;
- (f) The Financial Model should identify input capital expenditure and operating costs which should be referenced to costs in the Technical Cost Proformas as required under Annex 1 to Appendix A and Financial Proformas as required under Annex 1 to Appendix B;
- (g) The Financial Model should incorporate all of the Financial Proformas provided at Annex 1 to Appendix B, linked to worksheets in the Bidder's Financial Model so that the Proforma contents update automatically and can be reconciled to worksheets in which model calculations are performed;
- (h) The Financial Model should be capable running sensitivities in all the key areas of risk that funders are likely to focus on. As a minimum this should include the following:
  - (i) Delay to Financial Close;
  - (ii) Capital cost increases;
  - (iii) Construction programme delays;
  - (iv) Operational cost increases;
  - (v) Lifecycle cost increases;
  - (vi) Insurance cost increases;
  - (vii) Interest rate changes;
  - (viii) Inflation rate changes;
  - (ix) Corporation tax and VAT rate changes; and
  - (x) Deductions relating to the Payment Mechanism.

It is assumed that the Financial Model will be independently verified by the Bidder/Senior Funder as part of the process leading to Financial Close. Bidders are required to accept the risk that the model audit may prove the Annual Service Payment to be incorrect, and that they may not pass any additional costs on to the Board.

The Board will require sight of the Financial Model auditor's opinion letter that Bidder will obtain prior to Financial Close. For the avoidance of doubt the Board does not require a duty of care from the model auditors.

Bidders must submit three (3) CD copies of the Financial Model. The disks must be free of viruses. The Financial Model must include a print option macro.

During the Dialogue and evaluation phase, the Board may request Bidders to run key sensitivities and provide the results to the Board for analysis. Bidders' Financial Models must have the necessary functionality in order to undertake these sensitivities.

#### 3.9.3 Model Databook

The Bidder is required to provide a databook and user guide supporting the Financial Model for any relevant Submission. The databook should include the following details as a minimum:

- Summary of the content of the Financial Model, on a sheet by sheet basis;
- A table of location of inputs to the Financial Model with the cell/sheet reference and source;
- Copies of source documents (e.g. construction cashflow);
- An explanation of the methodology used to generate the financial projections;
- A definition of how the financial ratios are calculated, (which must be consistent with the Funders' term sheets), and that the underlying values are confirmed as acceptable to funders in their support letter;
- Details of the mechanisms contained in the Financial Model and an explanation of how key tasks in the Financial Model are carried out;
- A statement of the accounting policies applied to the Financial Model and their compliance with the relevant accounting standards; and
- A detailed statement of the assumptions used in relation to tax.

#### 3.10 Insurance

- 3.10.1 The Board has undertaken a review of the insurable and uninsurable risks that may emanate from the Project. Insurance provisions and minimum requirements have been set out in the NPD Project Agreement (at Clause 53 (Insurance), Schedule Part 15 (Insurance Requirements)) and Schedule Part 25 (Insurance Proceeds Account Agreement) in accordance with NHS Board requirements relative to NPD Projects in Scotland.
- **3.10.2** Insurances required under the Project will be reviewed and may be revised by the Board in line with Board strategy towards treatment of insurable risks in the Project, Project technical solutions and commercial considerations.
- **3.10.3** A waiver of subrogation option has been added at Clause 53.6 (Subrogation and Vitiation) of the NPD Project Agreement. Bidders are asked to identify separately the costs associated with this waiver in Part C (Waiver of subrogation for Consort and Consort Parties) of Appendix G (Insurance Response Matrix) of Volume 1 of the ITPD.
- **3.10.4** It is envisaged that the insurance provisions will be fully agreed and the insurance costs breakdown fixed prior to the close of Dialogue.

## **Insurance Response Requirements**

- 3.10.5 For the purposes of demonstrating compliance with the Board's requirements, and to assist in evaluation, Bidders are required to provide completed versions of the insurance matrices set out in Part 1 (Insurance Cost Matrix) and Part 2 (Insurance Technical Matrix) of Appendix G (Insurance Response Matrix) of Volume1 of the ITPD, clearly identifying where:
  - (i) there will be full compliance with the Board's insurance requirements; and

- (ii) the Bidder proposes alternative solutions to satisfy the Board's requirements and the rationale for these.
- 3.10.6 Bidders should ensure transparency in both the Financial Model and ITPD Submission. Bidders are required to provide detailed Required Insurances premium calculations and full details of associated Project insurance related costs in accordance with the format set out in Part 1 (Insurance Cost Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ITPD. Bidders are required to complete the Part 2 (Insurance Technical Matrix) of Appendix G (Insurance Response Matrix) of Volume 1 of the ITPD in a manner which is consistent with their mark-up of the NPD Project Agreement.

#### 4 COMPETITIVE DIALOGUE PROCESS

#### 4.1 Introduction

- 4.1.1 The Board has elected to use Dialogue to award the Project in accordance with Regulation 18 of the Regulations. Therefore, Dialogue commences upon the issue of the ITPD.
- 4.1.2 It is envisaged that the Dialogue process will comprise a series of meetings leading to submission of the Final Tender, as more fully described in this section. The Board intends to continue the Dialogue until it is satisfied that Solutions from one or more Bidders are capable of meeting the Board's requirements.
- 4.1.3 During Dialogue, the Board will:
  - a) discuss aspects of the NPD Project Agreement, the other key project documents including the Ancillary Agreements and the proposed risk allocation with the Bidders;
  - b) ensure equality of treatment among the Bidders and in particular, will not provide information in a discriminatory manner which may give any Bidder an advantage over another; and
  - c) not reveal to the other Bidders, Solutions proposed or any confidential information communicated by a Bidder without that Bidder's agreement.
- 4.1.4 Bidders are required to provide the following Submissions during the Dialogue Period:
  - a) Informal Submissions; and
  - b) Draft Final Tender.

At the close of Dialogue, Bidders will be invited to submit their Final Tender.

4.1.5 Each Bidder is required to develop only one Solution and provide Submissions in accordance with the requirements of this paragraph 4 (Competitive Dialogue Process).

## 4.2 Timetable of Dialogue Meetings

4.2.1 A series of monthly meetings have been scheduled to take place with each Bidder on the dates indicated in the table below. The Board may vary the timetable or terminate or alter the Dialogue process in any way at its sole discretion.

Activity	Week	Bidder A	Bidder B	Bidder C
	•	Dialogue Ope	ns	
Issue ITPD	0		12/03/13	
Briefing Meeting \ Q and A Sessions	1	Tue 19/03/13	Wed 20/03/13	Thu 21/03/13
Informal Submission 1	2	Mon 25/03/13	Tue 26/03/13	Wed 27/03/13
Dialogue Meeting 1	3	Tue 02/04/13	Wed 03/04/13	Thu 04/04/13
Informal Submission 2	6	Mon 22/04/13	Tue 23/04/13	Wed 24/04/13
Dialogue Meeting 2	7	Tue 30/04/13	Wed 01/05/13	Thu 02/05/13
Informal Submission 3	10	Mon 20/05/13	Tue 21/05/13	Wed 22/05/13
Dialogue Meeting 3	11	Tue 28/05/13	Wed 29/05/13	Thu 30/05/13
Informal Submission 4	14	Mon 17/06/13	Tue 18/06/13	Wed 19/06/13
Dialogue Meeting 4	15	Tue 25/06/13	Wed 26/06/13	Thu 27/06/13
Informal Submission	18	Mon 15/07/13	Tue 16/07/13	Wed 17/07/13
Dialogue Meeting 5	19	Tue 23/07/13	Wed 24/07/13	Thu 25/07/13
Draft Final Tender Submission	24	26/08/13		
Dialogue Meeting 6	28	Tue 24/09/13	Wed 25/09/13	Thu 26/09/13
Dialogue Closes				
Invitation to Submit for Final Tenders	30	11/10/13		
Submission of Final Tenders	35	11/11/13		

- 4.2.2 Each monthly Dialogue Meeting (Dialogue Meetings 1-6) shall involve the Board spending time with each Bidder. The format of such monthly meetings shall be:
  - (a) Initial meeting between the Board's full Core Evaluation Team and Bidder's team;
  - (b) The initial meeting shall (if required) break out into a series of sub-meetings concentrating on legal, technical and financial aspects of Bidder's proposals;
  - (c) The sub-meetings shall re-convene for a final wrap up meeting with the Board's full Core Evaluation Team and Bidder's team.
- 4.2.3 In advance of each Dialogue Meeting, Bidders are invited to submit specific material related to the agenda topics to be discussed ("Informal Submissions") as more fully set out in paragraph 4.5.3. These Informal Submissions by Bidders prior to the Dialogue Meetings shall enable the Board and its advisers to:
  - (a) review the work undertaken by Bidders since the previous Dialogue Meeting;
  - (b) provide any meaningful and relevant comments to the Bidders; and

- (c) avoid any time disconnect between the Board's comments and the development of Bidders' Solutions.
- 4.2.4 The Informal Submissions referred to in paragraph 4.2.3 above shall be required to be uploaded onto Conject in advance of each Bidder's Dialogue Meeting as outlined in the table at paragraph 4.2.1.

# 4.3 Dialogue and the Core Evaluation Team

- 4.3.1 Formal Dialogue Meetings will generally be chaired by one of the following members of the Board's team, who represent the following interests in evaluation:
  - Brian Currie (Project Director)
  - Iain Graham (Commercial and Legal)
  - Janice MacKenzie (Clinical and Service Users)
  - Carol Potter (Finance)
  - Jackie Sansbury (Operations and Commissioning)
- 4.3.2 Upon commencement of Dialogue, Bidders will have the opportunity to comment on the title and purpose of each meeting and to suggest changes they believe could be made in order to make the Dialogue more economic, efficient and effective.
- 4.3.3 Each Bidder will be required to attend the scheduled meetings set out at paragraph 4.2.1. However, Bidders can propose alternative dates no later than twenty (20) Business Days before a meeting is scheduled to take place and must explain to the Board (in broad terms) the reasons why this proposed change is necessary.
- 4.3.4 The Board will consider alternative dates proposed by Bidders provided this does not compromise its obligation to conduct an open, fair and transparent dialogue and subject to availability of the Board personnel and advisers.
- 4.3.5 The Board will confirm if they can accommodate an alternative date no later than fifteen (15) Business Days before a meeting is arranged to take place.
- 4.3.6 Where the Board is unable to accommodate an alternative date proposed by a Bidder, the Bidder is required to attend the original scheduled meeting as set out in paragraph 4.2.1.
- 4.3.7 The Board may, subject to the availability of its relevant resources and at its sole discretion and in accordance with the Regulations, meet Bidders in addition to the scheduled meetings before the submission of the Draft Final Tender. If the Board considers that additional meetings are required, these will be arranged by the Board and notified to the Bidders accordingly.
- 4.3.8 The Board will provide Bidders with a draft agenda for a scheduled or additional Dialogue Meeting no later than ten (10) Business Days before the date a Dialogue Meeting is arranged to take place. A draft agenda will include the following:
  - (a) Title;
  - (b) Date and time;
  - (c) Chairperson and Scribe;
  - (d) Attendees;

- (e) Purpose;
- (f) Parts of the ITPD to be discussed, and
- (g) Parts of a Bidder's Solution to be discussed and any supporting information that would make a discussion more meaningful.
- 4.3.9 Bidders are required to provide the supporting information requested by the Board and advise the Board of any changes or additions to be made to the draft agenda, together with any requests for clarification to facilitate discussions no later than six (6) Business Days before the date of a Dialogue Meeting.
- 4.3.10 The final agenda agreed by the Board and a Bidder will be circulated by the Board to all attendees no later than five (5) Business Days before a Dialogue Meeting.
- 4.3.11 The number of attendees at a meeting should be kept to a minimum and reflect the purpose and subject matter to be discussed.
- 4.3.12 The Board will endeavour to communicate a record of the actions that were agreed by the Board and a Bidder during a meeting no later than four (4) Business Days after a Dialogue Meeting takes place.
- 4.3.13 This information exchange will not constitute any decision by the Board and will be limited to a record of:
  - (a) the parts of a Solution presented and specified by a Bidder at the Dialogue Meeting; and
  - (b) any actions arising out of the Dialogue Meeting.
- 4.3.14 Nothing in this information exchange is, or should be, relied upon as a promise or representation as to the Board's ultimate decision in relation to the Dialogue for the Project.
- 4.3.15 Notwithstanding that the Board may not have objected to nor rejected a Bidder's Solution during the Dialogue Period, such Solutions shall not be considered by the Bidder to have been approved by the Board.

## 4.4 Briefing Meeting/ Q and A Session

- 4.4.1 A separate initial briefing meeting (the "**Briefing Meeting**") will be held with each of the three Bidders.
- 4.4.2 This will be an opportunity for each Bidder to meet the Project Owner, the Core Evaluation Team and members of the Board's project team, including its advisers. The Board will make a presentation to provide Bidders with an overview of the Project and in particular the detail and importance of the Reference Design and the demarcation between Mandatory Reference Design Requirements and Indicative Elements of the Reference Design.

It is envisaged that the agenda for the Briefing Meeting will include:

- (a) Introduction and purpose/agenda (*Project Director*);
- (b) Strategic context (*Project Owner/Director of Capital Planning*);
- (c) Clinical context/Reference Design (Clinical Lead/Project Director);

- (d) Operational context (Operations Lead/Director of Capital Planning);
- (e) Commercial issues (Board Legal and Financial Advisers);
- (f) Programme and process (*Project Director/Commissioning Lead*);
- (g) Q and A (Bidders).
- 4.4.3 The number of attendees from each of the Bidder's teams to the Briefing Meeting will be limited to a maximum of fifteen (15) each. Confirmation of the Bidder's attendees will be requested by the Board in advance.
- 4.4.4 In advance of the Briefing Meeting, Bidders will be invited to submit questions to the Board using Conject.

# 4.5 Dialogue and associated submission

- 4.5.1 It is envisaged that there will be five (5) Dialogue Meetings prior to submission of the Draft Final Tender. Initially the Dialogue will focus on the strategic direction of the Project and development of Bidders' proposals, including technical, financial and legal proposals. The Dialogue will then aid Bidders in developing Solutions capable of meeting the Board's requirements and refining them prior to submission of the Draft Final Tender. Informal Submissions, which shall not be evaluated, will be required in advance of the Dialogue Meetings to support the Bidders proposals. Feedback will be given to Bidders at each stage of the Dialogue and will inform the basis for the remaining Dialogue. The objective of Dialogue is to ensure Bidders are clear on the Board's requirements and allow each Bidder to develop a Solution that is capable of meeting the requirements set out in the ITPD. Dialogue will also be the opportunity for Bidders to explore innovative proposals and aspects of their approach that will add value with the Board.
- 4.5.2 The schedule of formal Dialogue Meetings and corresponding dates for Dialogue Meetings are set out in paragraph 4.2.1 above.
- 4.5.3 The proposed agenda topics and submission requirements for each Dialogue Meeting are set out in the following appendices to Volume 1 of the ITPD:
  - (a) Appendix A (i) (Technical Agenda Topics and Informal Submission Requirements) and (ii) (Submission Requirements);
  - (b) Appendix B (i) (Financial Agenda Topics and Submission Requirements); and
  - (c) Appendix C (i) (Legal Agenda Topics) and (ii) Submission Requirements and Evaluation).

It should be noted that this is a proposed guide to the agenda topics and submission requirements during Dialogue. Bidders may suggest changes, but this will require the agreement of the Board.

- 4.5.4 With each technical submission, Bidders are also required to provide a completed Annex 2 to Appendix A (ii) "Schedule of Design Deliverables for Technical Meetings during Dialogue Period" confirming the supporting drawings and information that Bidders are providing to support the Submission Requirements of the ITPD. Bidders should note that all drawings must be submitted at least once before submission of the Draft Final Tender
- 4.5.5 Throughout Dialogue the Board intends to provide Bidders with any updates to the NPD Project Agreement, its schedules and other project documents including the relevant Ancillary Agreements as set out in Volume 2 of the ITPD.

#### 4.6 Draft Final Tender

- 4.6.1 Bidders are required to submit a Draft Final Tender on or before noon on the date set out in the programme at paragraph 4.2 (Timetable of Dialogue Meetings) or such other dates as notified by the Board to the Bidders.
- 4.6.2 The Board will review the Draft Final Tenders to ensure compliance with the tender requirements set out within the ITPD. A final Dialogue Meeting will then take place as indicated on the programme at paragraph 4.2.1 (Timetable of Dialogue Meetings). This Dialogue will provide feedback to Bidders on the content of their Draft Final Tender and clarify any outstanding points.

# 4.7 Conditions for closing Competitive Dialogue

It is expected by the close of Dialogue, the terms of the NPD Project Agreement will have been agreed in all material respects. Once Dialogue has been closed, the Board shall invite each Bidder to submit a Final Tender.

#### 4.8 Final Tender

- 4.8.1 Once Dialogue has closed, the Board will issue an Invitation to Submit Final Tender to each Bidder. The requirements for this Invitation to Submit Final Tender are broadly set out in Appendices A, B and C of Volume 1 of the ITPD. However the Board reserves the right to amend or modify the requirements for the Invitation to Submit Final Tender.
- 4.8.2 The Invitation to Submit Final Tender shall set out the following:
  - (a) date for receipt of the Final Tender by the Board;
  - (b) conditions of the Final Tender;
  - (c) the submission requirements of the Final Tender; and
  - (d) the methodology which the Board will use to evaluate the Final Tender.
- 4.8.3 The Preferred Bidder shall only be permitted to fine tune and clarify aspects of its Final Tender in line with the requirements of procurement law.

# 4. 9 Submission requirements for the Draft Final Tender and Final Tender

- 4.9.1 Each Bidder shall ensure that its Submissions are provided using UK English, with all values expressed in UK Sterling/GB Pounds, using formats as specified in Submission Requirements.
- 4.9.2 Bidders shall ensure that one (1) electronic copy of the Draft Final Tender and/or Final Tender are delivered electronically via Conject in accordance with the Conject user manual contained in Volume 4 of the ITPD and two (2) hard copies are also delivered by receipted mail or by hand to:

RHSC and DCN Project Director Project Offices NHS Lothian 56 Canaan Lane Edinburgh EH10 4SG

- 4.9.3 The packages shall be clearly marked for the attention of the Project Director, Re-provision of RHSC and DCN at Little France.
- 4.9.4 No package should bear any mark indicating the Bidder's identity. If more than one package is delivered, they all shall carry some random unifying code number and an indication of the number of packages in total (e.g. 1 of 2, 2 of 2).
- 4.9.5 Each Bidder shall obtain a signed receipt acknowledging delivery of the Submission.
- 4.9.6 The Draft Final Tender and/or Final Tender shall be submitted no later than noon on the date for the relevant submission set out in the programme at paragraph 4.2 (Timetable of Dialogue Meetings) of Volume 1 of the ITPD or such other date as notified by the Board to the Bidders.
- 4.9.7 Submissions or requests received after specified dates and times shall not be accepted for consideration and shall be returned unopened to the sender unless there are extenuating circumstances beyond the control of the Bidder in which case on being satisfied that such extenuating circumstances existed, the Board may at their discretion accept such submission.
- 4.9.8 Draft Final Tender and Final Tender submissions shall not be accepted by email or facsimile unless otherwise instructed by the Board.
- 4.9.9 Each Bidders' Draft Final Tender and/or Final Tender shall be presented in three volumes volume 1: Technical response; volume 2: Financial response; and volume 3: Legal response. The content required in each section is defined in the following appendices to Volume 1 of the ITPD:
  - (a) Appendix A (ii) (Submission Requirements);
  - (b) Appendix B (i) (Financial Agenda Topics and Submission Requirements);
  - (c) Appendix C (ii) (Submission Requirements and Evaluation); and
  - (d) Appendix G (Insurance Response Matrix).
- 4.9.10 Each hard copy volume of a Bidders' Draft Final Tender and/or Final Tender shall be filed in a separate folder with its contents clearly marked on the outside with Bidder's name, volume number, folder number and copy number for example Volume 2, folder 1 of 3, copy 1.
- 4.9.11 Each folder shall contain an index list for that folder which shall be bound immediately inside the cover, including the page numbers of each folder.
- 4.9.12 Each page of each volume shall be numbered clearly and sequentially.
- 4.9.13 Submissions shall not include any loose pages.
- 4.9.14 Drawings shall be numbered and a drawing list shall be included as part of the index list under the appropriate heading.
- 4.9.15 Drawings shall not be larger than A1 size and shall be clearly referenced, folded and inserted into pockets within the appropriate volume.

- 4.9.16 Each Bidder shall nominate and mark one copy of the Draft Final Tender and/or Final Tender as the master copy. The master copy of the Submission shall be used as the primary source of reference during the evaluation process.
- 4.9.17 Bidders shall provide Draft Final Tender and Final Tender Submissions that contain all the elements required and necessary for the performance of the NPD Project Agreement on the basis of the Solution presented and specified by Bidders during the Dialogue Period and accepted by the Board and SFT under the derogations process.
- 4.9.18 Draft Final Tenders and/or Final Tenders must be completed under the headings, using the tables and information supplied by the Board, and shall follow the order and numbering contained in Appendices A, B and C of this Volume 1 of the ITPD.
- 4.9.19 Draft Final Tenders and/or Final Tenders that include key information that has not been presented and specified by Bidders during the Dialogue Period and/or the Board has previously confirmed is not capable of meeting the mandatory requirements will not be accepted by the Board.
- 4.9.20 Bidders should provide such information as is necessary to enable the Board to evaluate whether a Draft Final Tender and/or Final Tender is capable of meeting the Board's requirements.
- 4.9.21 The Board are entitled to modify Appendices A, B and C, of Volume 1 of the ITPD, the Board's requirements set out in Volume 1 of the ITPD generally, and/or require Bidders to omit specific aspects of a Solution at their absolute discretion where not agreed by the Board during the Dialogue Period pursuant to the parameters set out in the NPD Project Agreement, the Board's Construction Requirements and/or SFT under the derogations process subject to ensuring equality of treatment amongst all Bidders.
- 4.9.22 General information such as marketing and promotional information will not be accepted by the Board and all information provided by Bidders must be specific to the information that is requested.
- 4.9.23 Bidders are required to provide a Draft Final Tender and/or Final Tender that are acceptable to all legal entities (including, where relevant, any Senior Funders and relevant subcontractors) that are involved in the development of a Solution and the preparation of Draft Final Tender and/or Final Tenders.
- 4.9.24 Bidders shall note that the Board shall reserve its position on the acceptability or otherwise of the Draft Final Tender and/or Final Tender.

# 4.10 Conject (BIW)

- 4.10.1 The Project will use Conject during the ITPD process. Conject, formerly known as BIW, is a web-based construction collaboration portal. Procedures utilising Conject shall include:
  - (a) Data room access;
  - (b) Dialogue queries and Dialogue Period bulletin responses;
  - (c) Bid clarification queries and responses;
  - (d) Submitting Informal Submissions; and

(e) Submitting completed Draft Final Tenders and Final Tenders.

#### 4.11 Communication Protocol

- 4.11.1 All information and communication flows between the Board and Bidders outwith Dialogue Meetings will be via Conject. The process for information and communication flows between the Board and Bidders including queries, bulletins, submissions, and request for clarifications is set out in paragraph 4.11.2.
- 4.11.2 Information and communication flows between the Board and Bidders will be categorised as follows:
  - (a) Dialogue Period Query (Confidential/Not Confidential see paragraph 4.12) prepared by a Bidder and communicated to the Board;
  - (b) Dialogue Period Bulletin (Confidential/Not Confidential see paragraph 4.12) prepared by the Board and communicated to a Bidder (either in response to a Dialogue Period Query or otherwise);
  - (c) Dialogue Period Submission prepared by a Bidder and communicated to the Board; and
  - (d) Request for clarification prepared by the Board and communicated to a Bidder in response to a Dialogue Period Submission.
- 4.11.3 Please refer to Appendix D of Volume 1 of the ITPD for template form to be used by Bidders when sending a Dialogue Period Query. Please also refer to Appendix D of Volume 1 of the ITPD for template forms to be used by the Board when providing a Dialogue Period Bulletin.
- 4.11.4 The Board is entitled to decline to respond to any other form of information and communication flow sent by a Bidder.
- 4.11.5 Bidders may communicate a Dialogue Period Query to the Board no later than ten (10) Business Days before the date of any Submission.
- 4.11.6 The Board will endeavour to provide a Dialogue Period Bulletin in response to a Dialogue Period Query by no later than five (5) Business Days before the date of any Submission.
- 4.11.7 Receipt of information and communications flows between the Board and Bidders will be recorded in accordance with Conject User Manual.
- 4.11.8 Additionally, the Board reserve the right to issue additional information at any time during the Dialogue Period. The Board may exercise the option to postpone the return of the Draft Final Tender or Final Tender in the event that additional information is issued which has a bearing on the Draft Final Tender or Final Tender.

## 4.12 Commercially sensitive and confidential information

4.12.1 If a Bidder considers a communication or any part of its submission to be commercially sensitive and wishes it to be treated by the Board as confidential they should make it clear in the relevant section of the Dialogue Period Query template form and explain in concise terms what harm may result from its disclosure.

- 4.12.2 If the Board does not agree that a communication is commercially sensitive, the Bidder will be invited to withdraw this communication. In the event that this invitation is declined, the Board will distribute a response to all Bidders.
- 4.12.3 If the Board agrees that a communication is commercially sensitive it will be treated in the strictest confidence by the Board subject to an entitlement to share such communication with the relevant members of the Board's Project team including advisers and key stakeholders for the purposes of preparing a confidential response.
- 4.12.4 Any Dialogue Period Bulletin prepared by the Board in response to a Dialogue Period Query which is not commercially sensitive will be distributed to all Bidders.
- 4.12.5 During the Dialogue Period, the Board may:
  - (a) seek to establish the feasibility of a Bidder's Solution relevant to an aspect of the Project including obtaining the view of a third party, for example in relation to the interface with existing RIE Facilities; and/or;
  - (b) where not viewed as commercially sensitive by a Bidder, look to adapt its requirements to reflect, whether in whole or in part information provided and/or elements of a particular Bidder's Solution.

Both of the above may involve the passing of information to a third party.

- 4.12.6 In relation to paragraph 4.12.5 a) above, the Board shall adopt a process whereby it shall use its reasonable endeavours to procure that:
  - (a) any third party recipient of information will require to sign a confidentiality undertaking prior to receipt of any information;
  - (b) the Bidder will be provided with a consent request, prepared separately from other Dialogue documentation, in which it may detail information it is prepared to disclose to a third party, including any potentially competing third party, relevant to its proposals, and seeking consent for such disclosure; and
  - (c) Following receipt of such a consent request, a Bidder may at all times refuse or agree to disclose information to a third party.
- 4.12.7 In relation to paragraph 4.12.6(b) above, the Board will use its reasonable endeavours to seek the express consent of a Bidder as to whether a specific aspect of that Bidder's Solution can be adopted by the Board as a requirement for all Bidders to meet. A Bidder may withhold consent to the Board adopting such a requirement on the grounds that the Bidder has developed such requirement as part of its Solution and considers this requirement to be commercially sensitive and not capable of being disclosed to the other Bidders.

# 4.13 Building Information Modelling (BIM)

Building Information Modelling (BIM) is being increasingly used within the industry. The use of BIM is being encouraged by central government and the Board expect that Bidders will use BIM for the development and implementation of their proposals.

Bidders shall prepare a BIM execution plan for review by, and agreement with, the Board. The BIM execution plan must be prepared in accordance with BS1192 and shall be

submitted as part of the Bidder's Informal Submission during the Dialogue Period and form part of their Final Tender. Appendix J contains further details of the Board's BIM requirements for the Project.

#### 5 TENDER EVALUATION AND CONTRACT AWARD CRITERIA

#### 5.1 Introduction

- 5.1.1 This section outlines the approach to the evaluation methodology for the Final Tenders. The Informal Submissions and Draft Final Tender shall not be evaluated by the Board. These Informal Submissions and Draft Final Tenders shall be used as tools during the Dialogue Period for Bidders to set out their Solutions to the Board and for subsequent feedback on whether aspects of the Informal Submissions and Draft Final Tenders meet the Board's requirements set out in the ITPD. Bidders should note that there shall be no down selection of Bidders during the Dialogue Period.
- 5.1.2 Contract award will be on the basis of the offer, contained in the Final Tender, which is the most economically advantageous as set out in paragraphs 5.6 (Quality Evaluation Criteria), 5.7 (Price Evaluation) and 5.8 (Combining Price and Quality Evaluation), also in accordance with Part 5 of the Regulations.

# 5.2 Overview of Evaluation Process

- 5.2.1 The Final Tender evaluation will comprise the following steps:
  - (a) Completeness and compliance check as more fully set out in paragraph 5.3 (Compliance and Completeness);
  - (b) Compliance with the Stand Alone Requirements as more fully set out in paragraph 5.4 (Compliance with Stand Alone Requirements);
  - (c) Evaluation of Funding Proposals as more fully set out in paragraph 5.5 (Deliverability of Funding);
  - (d) Evaluation of all of the Quality Evaluation Criteria on a pass/fail basis as more fully set out in paragraph 5.6.2 (Quality Evaluation Criteria)
  - (e) Evaluation of those Quality Evaluation Criteria that are evaluated on a scored basis as more fully set out in paragraphs 5.6.3 (Quality Evaluation Criteria) which will result in a mark out of 40 being awarded to each Bidder;
  - (f) Price Evaluation (including commercial aspects) as more fully set out in paragraph 5.7 (Price Evaluation), which will result in a mark out of 60 being awarded to each Bidder; and
  - (g) Combination of Price Evaluation Mark and Quality Evaluation Mark, resulting in a mark out of 100 being awarded to each Bidder, as more fully set out in paragraph 5.8 (Combining Price and Quality Evaluation).

Should a Final Tender fail any of the steps set out in paragraphs 5.2.1 (a), (b), (c) or (d) above then no further evaluation will be carried out and the Final Tender will be deemed to be non-compliant.

5.2.2 Bidders should note that Board's requirements as referred to in Table B and Table C of paragraph 5.6 (Quality Evaluation Criteria) means all requirements of the Board as set out in Volume 2 and Volume 3 of (and any requirements referred to within) this ITPD, and as may

be supplemented, varied and/or refined (and disclosed by the Board to Bidders during Dialogue).

# 5.3 Compliance and Completeness

- 5.3.1 The Board will check each Final Tender for compliance and completeness to establish if it has been prepared and submitted in accordance with and meets the requirements set out in the Invitation to Submit Final Tender.
- 5.3.2 The Board is entitled to disqualify a Bidder if a Final Tender is not prepared and submitted in accordance with the requirements set out in the Invitation to Submit Final Tender. The Board's decision on this matter will be final.
- 5.3.3 The Board is entitled, but not obliged, to seek clarification from Bidders at any time in respect of incomplete and ambiguous information contained in a Final Tender.
- 5.3.4 In the event the Board receives incomplete or ambiguous information in a Final Tender or response to a request for clarification the Board is entitled to disqualify a Bidder and the Board's decision on this matter will be final.
- 5.3.5 The Board may request a Bidder to clarify a Final Tender received, but such clarification, specification and/or fine tuning shall not involve material changes to a Final Tender when such clarifications, specifications or fine tuning are likely to distort competition or have a discriminatory effect.

#### 5.4 Compliance with Stand Alone Requirements

5.4.1 The Board will check each Final Tender for compliance with the Stand Alone Requirements as identified in paragraph 2.3 (Stand Alone Requirements). Non compliance with the Stand Alone Requirements will result in the Final Tender being deemed to be non-compliant.

## 5.5 Deliverability of Funding

Bidders should assume for the purposes of Final Tender that the deliverability of the funding proposals will be evaluated on the following broad basis:

- (a) acceptability of proposed guarantees to be put in place to support the Project Co/consortium structure;
- (b) extent of Funders due diligence completed and demonstration of a robust process for conclusion of the Funders due diligence; and
- (c) extent of demonstrated support of Funders (including assessment of the quality of letters of support and any conditions of financing) and summarily for providers of any junior debt.

However the Board will provide additional guidance to Bidders as to the specific requirements of Final Tenders in relation to funding during the Dialogue Period and will confirm how such requirements will be evaluated at this stage. The evaluation of funding proposals shall be assessed on a pass/fail basis. A pass will be awarded where the Board is satisfied that proposals demonstrate acceptability against each of the above criteria, as such

criteria may be changed by the Board and notified to the Bidders during the Dialogue Period. It is the Board's intention that, during Dialogue and Draft Final Tender stages, Bidders will be made aware of elements of the proposed solution they are developing which are unlikely to achieve a pass.

## 5.6 Quality Evaluation Criteria

- 5.6.1 The Quality Evaluation Criteria (QEC), the basis for evaluation and, where relevant, their weightings are included in Table A below. Bidder's should note that Appendix A (ii) of the ITPD sets out for Bidder's (under the column "Submission Requirement") a description of technical aspects which the Board require, or where indicated anticipate Bidders should provide in their Submissions. Please note, however, that the individual submission requirements (for example, the bulleted points) are not and should not be treated by Bidders as sub-evaluation criteria. Bidder's are reminded that the QEC are as set out in Table A (duplicated in the first, second and third columns of Appendix A (ii) for ease of reference) and responses to each QEC will be evaluated only in accordance with this paragraph 5 and no other basis.
- 5.6.2 The Board are keen to ensure that the Bidder appointed Preferred Bidder is able to deliver the highest quality in respect of all of its requirements. Therefore in the first instance, all QEC will be evaluated on a pass/fail basis. Primarily the QEC will be evaluated in accordance with the pass/fail criteria set out in Table B of this paragraph 5.6. However, in some instances the Board's requirements for a QEC are not set out in Volume 2 and Volume 3 of the ITPD and as such Table B shall not apply. In those cases the QEC shall be evaluated by the Board based on the pass/fail criteria set out in the column headed "Pass / Fail Guidance" (where relevant) in Appendix A(ii) of the ITPD. It is the Board's intention that, during Dialogue and Draft Final Tender stages, Bidders will be made aware of elements of the proposed solution they are developing which are unlikely to achieve a pass in accordance with the relevant criteria, as set out in Table B or Appendix A (ii).
- 5.6.3 Following the pass/fail evaluation the Board will then carry out a detailed assessment of the remaining Final Tenders to evaluate some of the QEC based on a scored evaluation. The scored assessment shall only apply to those QEC flagged as "scored" in Table A of this paragraph 5.6. Each of these scored QEC shall be given a score of between 5 and 10 in accordance with the scoring system set out in Table C of this paragraph 5.6. The score for each QEC will then be multiplied by the QEC Weighting and divided by 10 to give a weighted score. The weighted score for each QEC will be added to give a total score for Quality out of 40 (the Quality Evaluation Mark).

Table A – Evaluation Basis and Weightings for Quality Evaluation Criteria

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
A – Execut	ive Summary		Not Scored	
B - Strateg	gic and Managem			
	B1	Clarity, robustness and quality of understanding of policy framework and approach to addressing these.	Scored	0.16
	B2	Clarity, robustness and quality	Scored	0.32

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
		of approach to contribution to delivering the Board's 'vision' and associated performance management regime		
	B3	Clarity, robustness and quality of understanding of Project outcomes and approach to contribution of delivering these	Scored	0.57
	B4	Clarity, robustness and quality, of approach to partnership and collaborative working with the Board and its partners	Scored	0.81
	B5	Clarity, robustness and quality of approach to staff development including recruitment, training, induction and HR issues	Scored	0.32
	B6	Clarity, robustness and quality of approach to delivering community benefits	Scored	0.32
	B7	Clarity, robustness and quality of approach to integration of design with facilities management considerations	Scored	0.32
	B8	Clarity, robustness and quality of approach to consortia management arrangements including approach to sub contractors	Scored	0.57
	B9	Quality of proposed personnel	Scored	0.32
	B10	Clarity, robustness and quality of approach to continuity throughout the Project	Scored	0.32
	B11	Acceptable organisational diagrams for each stage of Project	Pass/Fail	
	B12	Clarity, robustness and quality of approach to health and safety	Scored	0.81
	B13	Acceptable approach to environmental, quality and health and safety management systems	Pass/Fail	
	B14	Clarity, robustness and quality of approach to management of design development including integration with the Board and its partners	Scored	0.16
	B15	Acceptable	Pass/Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
		programme from appointment as Preferred Bidder to Financial Close		
C – Approa	ach to Design & (	Construction (23%)		
	C1	Clarity, robustness and quality of approach to meeting the stakeholders requirements in their design	Scored	2.64
	C2	Clarity, robustness and quality of approach to design quality	Scored	1.85
	C3	Clarity, robustness and quality of architectural and landscape design	Scored	2.64
	C4	Clarity, robustness and quality of approach to delivering innovation	Scored	2.64
	C5	Clarity, robustness, and quality of approach to adaptability and flexibility	Scored	2.64
	C6	Clarity, robustness and quality of way finding and signage proposals	Scored	1.06
	C7	Clarity, robustness and quality of interior design proposals	Scored	2.64
	C8	Clarity, robustness and quality of M&E engineering design proposals	Scored	1.06
	C9	Clarity, robustness and quality of natural and artificial lighting proposals	Scored	1.06
	C10	Clarity, robustness and quality of energy management proposals	Scored	1.85
	C11	Clarity, robustness and quality of equipment proposals	Scored	1.06
	C11A	Compliance with Minimum Level of Group 1 Equipment	Pass/Fail	
	C12	Compliance With Mandatory Reference Design Requirements	Pass/ Fail	
	C13	Acceptable approach to achieving planning permission	Pass/ Fail	
	C14	Acceptable vertical and	Pass/ Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
		horizontal movement strategy		
	C15	Acceptable ICT strategy	Pass/ Fail	
	C16	Acceptable fire planning strategy	Pass/ Fail	
	C17	Acceptable structural design proposals	Pass/ Fail	
	C18	Acceptable services, utilities and infrastructure proposals	Pass/ Fail	
	C19	Acceptable approach to achieving required BREEAM rating	Pass/ Fail	
	C20	Acceptable post Preferred Bidder stage design development proposals and design programme	Pass/ Fail	
	C21	Compliance with Board's Construction Requirements	Pass/ Fail	
	C22	Acceptable design life proposals	Pass/ Fail	
	C23	Acceptable construction programme and approach to monitoring	Pass/ Fail	
	C24	Clarity, robustness and quality of construction methodology	Scored	1.85
	C25	Acceptable approach to commissioning and handover	Pass/ Fail	
	C26	Acceptable approach to quality and environmental management systems	Pass/ Fail	
	C27	Acceptable approach to health and safety management	Pass/ Fail	
	C28	Acceptable approach to compliance with CDM regulations	Pass/ Fail	
	C29	Robustness of technical costs	Pass/ Fail	
	C30	Acceptable list of summary assumptions, clarifications and derogations	Not Scored	
	C31	Acceptable Interface Proposals	Pass / Fail	
D – Approa	ach to Facilities I	Management (12%)		
	D1	Clarity, robustness and quality of approach to management and administration of the Services and Contract	Scored	2.50
	D2	Acceptable approach to integration with Board policies and operation	Pass/ Fail	

SECTION	QUALITY EVALUATION CRITERIA REFERENCE	QUALITY EVALUATION CRITERIA	QUALITY EVALUATION BASIS	QUALITY EVALUATION CRITERIA WEIGHTING
	D3	Acceptable approach to ensuring quality management	Pass/ Fail	
	D4	Acceptable approach to ensuring environmental management	Pass/ Fail	
	D5	Acceptable approach to ensuring health and safety management	Pass/ Fail	
	D6	Acceptable approach to interfacing with the Board for undertaking works outside of access times	Pass/ Fail	
	D7	Clarity, robustness and quality of approach to partnership and resources including liaison, resources and supply chain management	Scored	2.50
	D8	Acceptable approach to business continuity planning	Pass/ Fail	
	D9	Acceptable fire safety policies and procedures	Pass/ Fail	
	D10	Clarity, robustness and quality of approach to performance and information management including; Helpdesk, programme maintenance lifecycle, performance monitoring, monitoring and records, regular reports and information requests, building services and statutory testing	Scored	4.50
	D11	Acceptable approach to unprogrammed maintenance	Pass/ Fail	
	D12	Clarity, robustness and quality of approach to service elements including; utilities management and grounds maintenance services	Scored	2.50
	D13	Robustness of technical costs	Pass/ Fail	
	D14	Acceptable list of summary assumptions, clarifications and derogations	Not Scored	
	D15	Acceptable approach to mobilisation of Facilities Management services	Pass/ Fail	

Table B – Pass / Fail Criteria for Quality Evaluation Criteria

	Pass / Fail Criteria
Pass	The Bidders approach:
	<ul> <li>demonstrates a satisfactory understanding of the Board's requirements; and</li> </ul>
	<ul> <li>delivers a satisfactory level of compliance with the Board's requirements.</li> </ul>
Fail	The Bidders approach:
	<ul> <li>fails to demonstrate a satisfactory understanding of the Board's requirements; or</li> </ul>
	fails to deliver a satisfactory level of compliance with the Board's requirements.

Table C – Scoring System for Quality Evaluation Criteria

Scoring Range	Categorisation	Description
5 – 10		
5	Satisfactory	The Bidder's approach:  demonstrates a satisfactory understanding of all aspects of the Board's requirements; and/or  proposes a solution which performs satisfactorily in complying with the Board's requirements.
6-7	Good	The Bidder's approach:  demonstrates a satisfactory understanding of all aspects of the Board's requirements and a detailed and good understanding of some aspects of the Board's requirements; and/or  proposes a solution which performs well against the Board's requirements.
8-9	Very Good	<ul> <li>The Bidder's approach:         <ul> <li>demonstrates a detailed and very good understanding of all aspects of the Board's requirements; and/or</li> <li>proposes a solution which, performs very well against the Board's requirements.</li> </ul> </li> </ul>

Scoring Range 5 – 10	Categorisation	Description
5 – 10		
10	Excellent	The Bidder's approach:
		<ul> <li>demonstrates an exceptional understanding of all aspects of the Board's requirements; and/or</li> </ul>
		<ul> <li>proposes a solution which performs very well in complying with the Board's requirements and excels in complying with some of the Board's requirements.</li> </ul>

### 5.7 Price Evaluation

#### 5.7.1 Economic Cost

The Economic Cost of the Submission will be determined by calculating the Net Present Value (NPV) of each Financial Submission over the period of the NPD Project Agreement using the following components:

- (a) NPV of Annual Service Payment The proposed total Annual Service Payment stream in the Bidder's Financial Model, taken from Financial Pro-forma 1 and verified against the Financial Model, prepared using the assumptions and specifications set out in paragraphs 3.8 and 3.9. The NPV will be calculated using the Treasury real discount rate of 3.5% (6.0875% nominal);
- (b) NPV of Surpluses The forecast level of surpluses in the Bidder's Financial Model, as presented in Financial Proforma 2 and verified against the Financial Model will be deducted from the NPV of the total Annual Service Payment. Due to the more uncertain nature of the surplus payments the NPV will be calculated using a real discount rate of 4.39% (7.0% nominal);
- (c) Equalisation Adjustment Any additional material related costs and revenues to be borne by the Board as a result of any Financial Submission, including the pass-through costs of energy and utilities, rates and insurance costs as set out in Financial Pro-forma 1. The impact of such costs will be estimated by the Board and expressed as an NPV of the adjustments made, discounted at a real rate of 3.5%. Where an Equalisation Adjustment (other than the pass-through costs) has been made, the nature of and rationale for the adjustment will be disclosed to the Bidder; and
- (d) Quantifiable Bidder Amendments The Economic Cost will include an amount that reflects the deemed value (whether positive or negative) of any (i) amendments, caveats or qualifications to the NPD Project Agreement or specification that affect the risk profile of the Project or (ii) elements of the Financial Submission, that have or, in the reasonable opinion of the Board may have, a significant and quantifiable financial impact on the Board (a 'Quantifiable Bidder Amendment'). For this purpose, the deemed value of the Quantifiable Bidder Amendment will be the estimated financial impact to the Board of the risk occurring multiplied by the estimated probability of that risk being realised. Such values will be converted to an NPV using the 3.5% real discount rate.

Where any such Quantifiable Bidder Amendments and/or Equalisation Adjustments are identified, these will be discussed and the deemed value shared with each Bidder during Dialogue.

## 5.7.2 Price Evaluation Mark

The Economic Cost derived from the components described in paragraph 5.7.1 will be scored as shown in the table below, with the Bidder with the lowest Economic Cost scoring the maximum 60 (the **Price Evaluation Mark**).

Deviation from lowest Economic Cost	Price Evaluation Mark
=0.25%</td <td>60</td>	60
>0.25%, =0.50%</td <td>59.75</td>	59.75
>0.50%, =0.75%</td <td>59.625</td>	59.625
>0.75%, = 1.00%</td <td>59.5</td>	59.5
>1.00%, = 1.50%</td <td>59.25</td>	59.25
>1.50%, =2%</td <td>59</td>	59
>2%, =3%</td <td>58.5</td>	58.5
>3%, =4%</td <td>58</td>	58
>4%, =5%</td <td>57.5</td>	57.5
>5%, =6%</td <td>56.5</td>	56.5
>6%, =7%</td <td>55.5</td>	55.5
>7%, =8%</td <td>54.5</td>	54.5
>8%, =9%</td <td></td>	
>9%, =10%</td <td></td>	
>10%, =11%</td <td>50.5</td>	50.5
>11%, =12%</td <td>48.5</td>	48.5
>12%, =13%</td <td>46.5</td>	46.5
>13%, =14%</td <td>44.5</td>	44.5
> 14%, = 15%</td <td>42.5</td>	42.5
> 15%, = 16%</td <td>40.5</td>	40.5
> 16%, = 17%</td <td>37.5</td>	37.5
> 17%, = 18%</td <td>34.5</td>	34.5
> 18%, = 19%</td <td>31.5</td>	31.5

Deviation from lowest Economic Cost	Price Evaluation Mark
> 19%, = 20%</td <td>28.5</td>	28.5
> 20%, = 21%</td <td>24.5</td>	24.5
> 21%, = 22%</td <td>20.5</td>	20.5
> 22%, = 23%</td <td>16.5</td>	16.5
> 23%, = 24%</td <td>12.5</td>	12.5
> 24%, = 25%</td <td>8.5</td>	8.5
> 25%	0

# 5.8 Combining Price and Quality Evaluation

For each Bidder, the Price Evaluation Mark (out of 60) will be added to the mark for the Quality Evaluation Mark (out of 40) to give a total mark out of 100. The Final Tender with the highest combined mark will be deemed by the Board to be the most economically advantageous tender.

#### **6 GENERAL PROCUREMENT RULES**

### 6.1 Introduction

This section outlines the general procurement rules applying to the Project competition in addition to those set out in section 4 (Competition Dialogue Process) relevant to submission requirements and elsewhere within the ITPD.

## 6.2 Information provided to Bidders – Confidentiality and Crown Copyright

By receiving the ITPD, each Bidder agrees to keep confidential the ITPD to Participate in Dialogue and all of the Information Provided.

Bidders shall not reproduce the ITPD in any form (including photocopying or storing by electronic means) or any other Information Provided for any purpose other than that specifically necessary to make a Submission without the specific written permission of the Board.

The ITPD and Information Provided may be made available to a Bidder's members, employees and professional advisers directly involved in the appraisal of such information (who must be made aware of the obligation of confidentiality) but shall not, either in whole or in part, be copied, reproduced, distributed or otherwise made available to any other party in any circumstances without the prior written consent of the Board, nor may it be used for any other purposes than that for which it is intended.

The ITPD (including any copies and or any supplemental or referenced documents) and any Information Provided is and shall always remain the property of the Board who is entitled to demand their return and/or destruction at any time.

### 6.3 Information provided to Bidders - Warnings / Disclaimers

While the Information Provided has been prepared in good faith, it does not purport to be comprehensive nor to have been verified by the Board or any of their advisers. Neither the Board nor any of their agents or advisers accept any liability or responsibility for the accuracy, adequacy or completeness of any opinions, commentary, information and documentation contained in the ITPD or of any other opinions, commentary, information and documentation made available during the Tender Period or in respect of any Final Tender. No representation or warranty, express or implied, is or will be given by the Board or any of their agents or advisers with respect to such opinions, commentary, information and documentation. Any liability therefore is hereby expressly disclaimed.

It is not warranted that the Information Provided shall identify or provide Bidders with Solutions for the attainment of the Board's requirements. It is the responsibility of each Bidder to develop their proposals to ensure that they satisfy the Board's requirements.

Bidders must obtain for themselves at their own responsibility and expense all information necessary for the preparation of their Submissions during the Tender Period and in respect of any Final Tender.

Bidders must complete and provide all information in accordance with the conditions and requirements of the ITPD.

## 6.4 Restrictions on the Use of the Invitation to Participate in Dialogue

The ITPD and subsequent Information provided should not be considered as an investment recommendation made by the Board or any of its advisers or agents to any of the Bidders. Each person to whom the ITPD is issued should make its own independent assessment of the Project competition and all matters relevant to that competition and to the Project after making such investigation and taking such professional advice as it deems necessary.

Nothing in the ITPD is, or should be, relied upon as a promise or representation as to the Board's ultimate decision in relation to the Project competition and/or the award of a public contract.

## 6.5 The Board's Right to Terminate

Bidders' attention is drawn to the fact that, by issuing the ITPD, the Board is in no way committed to accepting any Final Tender or identifying a Preferred Bidder.

The Board reserves the right, in its absolute discretion, to terminate, cancel or abandon the Project competition at any time before the execution of the NPD Project Agreement without giving prior notice to Bidders. In the event that the Project competition is so terminated, the Board will have no liability whatsoever to a Bidder, their subcontractor(s), their funders, the advisers to the Bidder or adviser(s) to any subcontractor(s) or funders for any costs incurred in connection with the Project competition.

## 6.6 Board's right to vary the process

The Board reserves the right, at its discretion, and subject to compliance with procurement law requirements:

- 6.6.1 to change the basis of, terms of or the procedure for, the process, including the timing, form and substance of the procedure of the Project competition. Under no circumstances shall the Board incur any liability in respect thereof;
- 6.6.2 to issue supplementary documentation at any time during the Project competition in order to clarify any matter and/or amend any aspect of the Information Provided;
- 6.6.3 amend the Board's requirements, Mandatory Reference Design Requirements, NPD Project Agreement and/or any other aspect of the Board's procurement documentation.

Any changes shall be communicated to Bidders as quickly as possible.

#### 6.7 Conduct and Conflicts of interest

The Board wishes to avoid or resolve any conflicts of interest or other matters which may compromise its legal obligations relevant to conducting an open, transparent, fair and non-discriminatory competitive procurement. A Bidder must, accordingly, ensure that its participation in the Project competition that may lead to the award of a contract does not in any way compromise the Board's performance of its obligations.

A Bidder must consider these matters carefully on an ongoing basis and ensure that its actions are not capable of compromising the Board's ability to meet its obligations.

If in doubt, a Bidder must declare a potential conflict of interest and inform the Board of the measures the Bidder intends to implement to avoid it occurring.

The Board and Bidders will seek to agree the measures that are necessary to avoid any conflicts of interest or potential conflicts of interest arising.

In the event that an agreement cannot be reached and the Board considers its obligations in relation to the procurement are compromised, the Board reserves the right to disqualify a Bidder from the Project competition. The Board's decision on this matter will be final.

Each Bidder shall ensure that all relevant entities involved in its participation in the Project competition, including, without limitation, consortia members, subcontractors and all relevant technical, financial and legal advisers, are aware of the provisions of this paragraph 6 and do not breach any of the provisions set-out herein

### 6.8 Canvassing and contacts

Except as provided in the ITPD, Bidders shall not approach staff of the Board or staff of the Board's advisers or contractors with a view to obtaining information or clarification in respect of any part of their Submission or solution or attempting to support or enhance their prospect of being identified as the Preferred Bidder. Any such approach or attempted approach by a Bidder may lead to the Bidder's disqualification.

Bidders are required to complete a Certificate of Non-Collusion and Non-Canvassing as part of their Final Tender.

## 6.9 Disqualification/Rejection of Bidders

In accepting delivery of the ITPD, each Bidder agrees to abide by the provisions and conditions that it contains, or which are set out in any subsequent Information Provided in relation to the Project competition, in all and any dealings or communications, during the course of the Dialogue and in respect of any Final Tender or otherwise in relation to the Project.

The acceptance of the ITPD by a Bidder will imply acceptance of its provisions by Bidders without qualification. Any attempt to qualify provisions, either expressly or impliedly, may result in the Bidder being disqualified.

The Board reserves the right to reject or disqualify a Bidder where:

- 6.9.1 a Bidder's Submission is submitted late, completed incorrectly, incomplete or fails to include a Solution capable of meeting the Board's requirements; and/or
- 6.9.2 the Bidder or any person or entity involved with the Bidder's participation in the Project competition is guilty of serious misrepresentation in relation to any aspect of the Project competition; and/or
- 6.9.3 there is a change in identity, control, financial standing or other factor impacting on the selection and/or evaluation process affecting the Bidder including, where the Bidder is a consortium, changes relevant to Consortium membership and members, and such changes shall be addressed in accordance with paragraph 6.13; and/or
- 6.9.4 the Bidder or any person or entity involved with the Bidder's participation in the Project competition contravenes any of the terms of the ITPD or terms set out in any subsequent Information Provided, including within the Invitation to Submit Final Tenders; and/or

- 6.9.5 the Board becomes aware that information provided by the Bidder or any person or entity involved with the Bidder's participation in the Project competition is intentionally or unintentionally false, misleading or incorrect; and/or
- 6.9.6 the Bidder or any entity involved with the Bidder's participation in the Project competition prejudices the Project competition by failing to take steps to address a conflict of interest or other matters which impact negatively on the Board's ability to meet its procurement law obligations.

### **6.10** Costs

All work undertaken and costs incurred by Bidders in relation to any stage of the Dialogue relating to the Tender Period and any Final Tender, or otherwise in relation to the Project, shall be at each Bidder's own risk and expense.

#### 6.11 Freedom of Information

FOISA and the Environmental Information (Scotland) Regulations provide significant and important rights to access information and the Board supports FOISA's and the Environmental Information (Scotland) Regulations' underpinning principles by encouraging behaviour which is open, transparent and increases public participation. Accordingly, all information submitted to the Board may be disclosed by the Board in response to a request under FOISA and the Environmental Information (Scotland) Regulations or in response to Legislation requiring the disclosure of information by the Board. The decisions of the Board in the interpretation thereof shall be final and conclusive in any dispute, difference or question arising in respect of disclosure. The Board may also decide to include certain information in the publication scheme which it maintains under FOISA and the Environmental Information (Scotland) Regulations.

Further, the Board may also disclose all information submitted to them to the Scottish or United Kingdom Parliament or any other department, office or agency of Her Majesty's Government in Scotland or the United Kingdom, and their servants or agents.

If a Bidder considers that any of the information to be provided is commercially sensitive, it shall be obliged to identify it and explain to the Board (in broad terms) what harm may result from its disclosure. Bidders should be aware that, even where it has indicated that information is commercially sensitive, the Board may be required to disclose it and as such reserves the right to do so.

Bidders should also note that the receipt of any material marked 'confidential' or equivalent by the Board should not be taken to mean that the Board accept any duty of confidence by virtue of that marking.

The Board may publish, on the Scottish Government and the Board's websites, the names and contact details of Bidders who have been issued with the ITPD.

#### 6.12 Collusion

Any collusion between Bidders, their subcontractors or advisers will lead to the exclusion of the Bidders involved at the discretion of the Board.

Bidders shall be required to sign the Certificate of Non-Collusion and Non-Canvassing and to submit it no later than five (5) Business Days from the date of issue of the ITPD.

### 6.13 Changes in Bidder Circumstances

Each Bidder is required immediately to bring to the Board's notice any change in the identity of any organisation, consortium member or entity identified and evaluated in its pre-qualification submission since the submission of the Pre-Qualification Questionnaire and such change may only be made with the prior written agreement of the Board. Any additional information provided by a Bidder pursuant to the requirements of this section will be evaluated in accordance with the selection criteria in respect of such information in the Pre-Qualification Questionnaire. The Board has selected the Bidders on the basis of information provided by them concerning their eligibility, the economic and financial standing, technical and professional ability. The Board reserve the right to withdraw the selection of a Bidder at any time if the Board concludes that a Bidder is ineligible, no longer satisfies the minimum standards of economic and financial standing or technical and professional ability or is otherwise required by its procurement law obligations to reject the Bidder.

### 6.14 Non Compliance

Any Submission provided without the Bidder complying with the requirements of the ITPD or any Invitation to Submit Final Tender may be rejected by the Board.

## 6.15 Publicity and Media Statements

Bidders shall obtain the Board's specific written permission (on form, content and purpose) before any statements or other disclosures regarding their involvement in the procurement of the Project are made public (media, seminars, websites, conferences, promotional material etc).

### 6.16 Variant Bids

In accordance with the OJEU Notice, Bidders should be aware that no variant bids will be permitted.

## Appendix A (i) –Technical Agenda Topics and Informal Submission Requirements

Bidders should note that the table below is a proposed guide to the agenda topics during Dialogue. It may however be subject to change to reflect the outcome of Dialogue and bidder specific issues. Bidders may suggest changes, but this will require the agreement of the Board.

With each Technical submission, Bidders are also required to provide a completed Annex 2 of Appendix A (ii) – "Schedule of Design Deliverables for Technical Meetings during Dialogue Period" confirming the supporting drawings and information that Bidders are providing in support of the Bid Submission Requirements. Bidders should note that all design deliverables must be submitted at least once before the Draft Final Tender submission.

#### **Technical**

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
Meeting 1	Strategic Understanding, Vision, Understanding outcomes, Collaborative working	B1, B2, B3, B4.
	Design General approach to design covering stakeholders requirements, strategic approach to design, architectural and landscape strategy, innovation and adaptability/flexibility. Planning permission,  Approach to BIM and development of drawings	C1, C2, C3, C4, C5, C12, C13
	Equipment Approach to equipment.	C11
	Facilities Management Approach to FM and integration with Board policies	D1, D2.
	Costs Approach to development of Capex and Opex	C29, D13
Meeting 2	<u>Strategic</u>	

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	HR issues, Community Benefits, Integration of Design & FM Meeting 1 update.	B5, B6, B7
	Design Approach to M&E, daylighting and artificial lighting and energy management. Update from Meeting 1.	C8, C9, C10
	Initial draft proposals for layout and architecture and development of BIM.	
	Construction Approach to construction methodology and programme	C23, C24
	Interface Proposals	C31
	Facilities Management Approach to FM QA, Environmental Management, Health & Safety and out of hours working. Update from Meeting 1	D3, D4, D5, D6
	Costs Report on development of Capex and Opex with draft costs.	C29, D13
Meeting 3	Strategic Consortia management, proposed personnel, organisation, maintaining continuity. Update from Meeting 2	B8, B9, B10, B11
	Design Approach to vertical and horizontal movement, ICT, fire, structural engineering and site services and utilities.	C14, C15, C16, C17, C18

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	Update from Meeting 2	
	Developed proposals for layout and engineering – further development of BIM.	
	Construction Update on approach to construction methodology and programme.	C23, C24
	Interface Proposals Update from meeting 1.	C31
	Equipment Draft proposals for equipment strategy including group 1 equipment.	C11
	Facilities Management General FM management proposals and approach to FM partnering, business continuity, fire strategy.	D7, D8, D9, D10
	Update from Meeting 2.	
	Costs Report on development of Capex and Opex with further developed costs.	C29, D13.
	Insurance Report on insurance in accordance with Appendix G (Insurance Response Matrix)	
Meeting 4	Strategic Consortia approach to health and safety, H&S, QA and environmental management systems, design management programme for period from Preferred Bidder to	B12, B13, B14, B15

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	Financial Close.	
	Update from Meeting 3.	
	Design Wayfinding, interior design, comparison with reference design, planning permission, BREEAM.	C6, C7, C12, C13, C19
	Update from Meeting 3.	
	Further development of BIM with draft versions of submission drawing requirements.	
	Construction Final approach to construction methodology and programme, commissioning and handover, QA, construction health and safety and CDM.	C23, C24, C25, C26, C27, C28
	Equipment Review of final equipment proposals.	C11
	Facilities Management Approach to services elements, unprogrammed maintenance. Assumptions made and mobilisation proposals.	D11, D12, D14, D15.
	Costs Report on development of Capex and Opex with further developed costs.	C29, D13.
	Insurance Update from Meeting 3.	
Meeting 5	<u>Strategic</u>	
J	Update on Meeting 4 and final review.	

Meeting	Topics/Subject Areas	Submission in advance of meeting (cross ref. to Submission Requirements Table) supported by deliverables, where appropriate, as listed in AP1.1 (drawings) and 1.2 (specifications)
	Design Review of final response to general approach to design covering stakeholders' requirements, strategic approach to design, architectural and landscape strategy, innovation and adaptability/flexibility.  Final review of BIM and draft versions of all drawing submission requirements.	C1, C2, C3, C4, C5
	Construction Compliance with BCRs, design life proposals, assumptions, clarifications and derogations. Final update on programme, commissioning and handover, QA, construction health and safety and CDM.	C20, C22, C30 C23, C24, C25, C26, C27, C28
	Equipment Feedback on final equipment proposals	C11
	Facilities Management Review and update on FM proposals.	
	Costs Report on finalisation of Capex and Opex with final draft costs.	C29, D13.
	Insurance Update from Meeting 4.	
Meeting 6	Feedback on Draft Final Tender submission.	

## Appendix A (ii) - Submission Requirements

The technical Submissions submitted by the Bidders shall be structured following the same numbering reference system as set out in the "Quality Evaluation Criteria and Reference" and the "Submission Requirement Reference" in the table below.

In relation to the technical Submission Requirements for C (Approach to Design and Construction), subject to the requirements of paragraph 4 of Volume 1 of the ITPD and to encourage and facilitate innovative technical solutions, Bidders are permitted to submit its responses in a format (e.g. written responses, drawings or other representations) which they consider most appropriate to best demonstrate an understanding of the Board's requirements and/or a solution which complies with the Board's requirements. However, as a minimum, the Board would require all design deliverables set out in AP1.1 and AP1.2 to be submitted as part of the Submission Requirements for C (Approach to Design and Construction) and each response (C1 to C31) should refer to which Design Deliverables within AP1.1 and AP1.2 support the response.

The technical submission requirements submitted by the Bidders in response to section C (Approach to Design and Construction) below will ultimately form part of Project Co's Proposals in accordance with the NPD Project Agreement.

The technical submission requirements submitted by the Bidders in response to section D (Approach to Facilities Management) below will ultimately form part of the Method Statements in accordance with the NPD Project Agreement.

The technical submission requirements submitted by the Bidders in response to section B (Strategic and Management Approach) below will form part of Project Co's Proposals and/or the Method Statements in accordance with the NPD Project Agreement.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
A. Executive Summary					
A1	Not Scored	n/a	A1.1	Bidders must submit an Executive Summary of their Final Tender. The Executive Summary shall include:	
				<ul> <li>An overview of the Bidders' approach to the Project;</li> </ul>	
				The Bidders' understanding of the Project, key Board requirements and	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				the main factors, as determined by the Bidder that will influence the deliverability of the Project. In addition a concise statement describing the Bidders' approach to address the factors identified;	
				<ul> <li>An indication of what the Bidders bring to the Project by way of skills or innovative solutions to meet their own criteria for success;</li> </ul>	
				<ul> <li>An overview of the Bidders' accepted list of key assumptions or clarifications</li> </ul>	
				<ul> <li>An overview of the Bidders' proposed design solution and integration with the Site; and</li> </ul>	
				<ul> <li>An overview of the Final Tender from a financial perspective, including a summary of capital costs, the Unitary Payment and funding structures.</li> </ul>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B. Strategic and Management Approach					
B1. Clarity, robustness and quality of understanding of policy framework and approach to addressing these.	Scored	0.16	B1.1	Bidders must submit proposals setting out their understanding of the relevant local and national health policies and describe how these strategic issues have been included within the Bidders' Final Tender submission, in particular with respect to the delivery of solutions specific to this Project.	To Pass, Bidders will be required to demonstrate a clear understanding of national health policies specific to the Project.
B2. Clarity, robustness and quality of approach to contribution to delivering the Board's 'vision' and associated performance management regime	Scored	0.32	B2.1	Bidders must submit proposals setting out how their proposals will enhance and contribute to the Board's vision. Bidders should explain their role in delivering the Board's vision, and include proposed performance management mechanisms for demonstrating Project Co's contribution to the achievement of this vision.	To Pass, Bidders will be required to demonstrate that they will contribute to the Board's vision.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B3. Clarity, robustness and quality of understanding of Project outcomes and approach to contribution of delivering these	Scored	0.57	B3.1	Bidders must submit proposal setting out their understanding of the Project outcomes (as outlined in the Boards benefits realisation plan) and how their proposals will contribute to the delivery of outcomes/benefits with specific details of how the Bidder has already addressed these in their Final Tender submission, or how they will be addressed after Final Tender submission. Bidders must also outline what they offer by way of skills and/or innovative solutions to deliver these outcomes/benefits.	To Pass, Bidders will be required to demonstrate that they understand the Project outcomes and will contribute to these.
B4. Clarity, robustness and quality, of approach to partnership and collaborative working with the Board and its partners	Scored	0.81	B4.1	Bidders must submit a method statement outlining their approach to collaborative working and developing and maintaining a successful long term partnership with the Board and its partners, (i) in the period from Preferred Bidder appointment to Financial Close; (ii) throughout the construction period; and (iii) operational period of the contract confirming in their proposals:  • What they believe to be the factors critical to achieving a successful relationship (both short term and long term);	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to collaborative working.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>Their understanding of the key interface issues and how they intend to manage these and integrate with the existing relationships;</li> <li>How they will develop and maintain a full understanding of the Boards' objectives including matters identified during Dialogue;</li> <li>How their objectives can reflect and adapt to the Board's goals as they evolve over time; and</li> <li>The manner in which they will conduct themselves that accords with the culture of the Board, local communities and other key stakeholders to the Project.</li> </ul>	
B5. Clarity, robustness and quality of approach to staff development including recruitment, training, induction and HR issues	Scored	0.32	B5.1	Recruitment The Bidders must submit proposals setting out details of the following:  • Approach to recruitment and vetting of staff, including as appropriate relevant security clearances (e.g. Disclosure Scotland, Protection of Vulnerable Groups Scheme etc);  • Procedures for working in areas with children or vulnerable persons; and	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to staff development.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>Details of its employment policy and evidence that employees and prospective employees are treated fairly irrespective of race, gender, religion, disability or background.</li> </ul>	
			B5.2	Human Resources Issues The Bidders must submit proposals setting out:  • Details of their Occupational Health approach for staff having come into contact with high risk person or areas.	
			B5.3	<ul> <li>Training and Induction</li> <li>The Bidders must submit proposals setting out: <ul> <li>Details of any achievement in relation to the Investors In People initiative (or equivalent);</li> <li>Details of the Bidder's employee development and appraisal system;</li> <li>Details of its own and its supply chain's training policy and procedures, including an indication of the training to be offered to the on-site staff specific to this Contract and a statement of the percentage of their annual turnover which is spent on staff training;</li> </ul> </li></ul>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>Details of induction programme and ongoing training for staff, specifically working with HV systems and Legionella control; and</li> <li>Details of induction programme for sub-contractors.</li> </ul>	
B6. Clarity, robustness and quality of approach to delivering community benefits	Scored	0.32	B6.1	Bidders must submit their proposals to deliver community benefits as part of the Project in accordance with Clause 73 (Community Benefits) of the NPD Project Agreement and Appendix I of Volume 1 of the ITPD. These should include specific proposals covering economic, environmental and social benefits related to the Project during both the construction and operational stages of the Project.	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to community benefits (including complying with the minimum targeted recruitment numbers set out in Appendix I Section 2.1).
B7. Clarity, robustness and quality of approach to integration of design with facilities management considerations	Scored	0.32	B7.1	Bidders must submit proposals demonstrating how a consistent and a coordinated approach will be developed and assured between the building design and FM solutions. Bidders shall take account of the hard FM site interface issues and integration with the soft FM which will be provided by the Board. Bidders responses shall include specific	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to integration of design with facilities management.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>How their design development process will consider and incorporate the FM aspects at each stage of the process from pre financial close through to construction; and</li> <li>The method by which design coordination issues will be managed and FM interface issues raised with the Board and its partners.</li> </ul>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B8. Clarity, robustness and quality of approach to consortia management arrangements including approach to sub contractors	Scored	0.57	B8.1	Bidders must submit proposals setting out details of how its consortium will be managed, setting out the key roles and their responsibilities including technical roles within their consortium they have identified as key to the Project during contract finalisation, construction and operational stages and Project Co's role in leading the project management. This shall include team leaders for all principal disciplines, both before and after financial close, and may include but not be limited to the following:  • Project and programme management;  • Design;  • Works;  • Services; and  • Quality, safety and environmental management including HAISCRIBE and BREEAM.  Where any element of the Works and/or Services are to be provided by subcontractors other than the Contractor or Service Provider(s) Bidders must submit details of:	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to consortia management proposals.
				<ul> <li>The selection process undertaken for such sub contractors that are confirmed at the time of submitting Final Tender, and/or the selection process (including timescales) that will be undertaken for</li> </ul>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>those subcontractors yet to be confirmed; and</li> <li>The manner in which performance of the sub contractors will be secured and integrated within the overall performance requirements of the Board's output specifications.</li> </ul>	
B9. Quality of proposed personnel	Scored	0.32	B9.1	Bidders must submit a summary curriculum vitae (maximum of two pages per person) of the personnel proposed for the roles identified in B8 above which shall include (as a minimum) details of key experience, education and professional status.	To Pass, Bidders will be required to demonstrate that their key personnel have satisfactory levels of experience.
B10. Clarity, robustness and quality of approach to continuity throughout the Project	Scored	0.32	B10.1	Bidders must submit proposals setting out their continuity plan for all stages of the project. The key matters to be addressed will include:  • how any changes in personnel between their pre and post financial close teams will be managed and communicated; • describe how as part of the design development process they view Project Co's role in ensuring design continuity and knowledge transfer. This will include how they will achieve design team continuity throughout the whole design development, construction and operational phases considering the consortium team and design organisations, and the key personnel	To Pass, Bidders will be required to demonstrate that there will be continuity throughout the Project.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				working within each of those organisations. The continuity plan shall address proposals for the role of design staff on-site during the development and the Works phase; and  the submission should particularly address the issue of consistency of personnel throughout the project and the need for procedures to deal with knowledge transfer to ensure smooth transition when required.	
B11. Acceptable organisational diagrams for each stage of Project	Pass/Fail	n/a	B11.1	Bidders must submit organisation diagrams for the consortium including the lines of communication with the Board and other key stakeholders for each of the phases of the project including:  • contract finalisation (appointment of Preferred Bidder to Financial Close);  • construction and commissioning period; and  • operational term.	To Pass, Bidders will be required to demonstrate a clear organisational structure for each stage of the Project.
B12. Clarity, robustness and quality of approach to health and safety	Scored	0.81	B12.1	Bidders must submit a detailed health and safety strategy which the Bidder proposes to adopt to comply with in fulfilling their health and safety obligations throughout the project, covering the following phases:  • contract finalisation (appointment of	To Pass, Bidders will be required to demonstrate they will adopt a robust approach to health and safety.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				Preferred Bidder to Financial Close);     construction and commissioning period; and     operational term.  In particular, the proposals should address Project Co's leadership role and key project roles throughout and particularly in the delivery and management of the Project on a 24/7 operational site, addressing key issues such as:	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>Details of business continuity plans.</li> </ul>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B13. Acceptable approach to environmental, quality and health and safety management systems	Pass/Fail	n/a	B13.1	Bidders must submit proposals setting out how Project Co intends to set up, manage, maintain, work towards and gain accreditation of its environmental, health and safety and quality management systems including specific proposals on:  • The systems to be developed and implemented;  • How these systems will be put in place;  • The process for the development of the systems;  • Interim measures while the systems are being developed; and  • Timescales for accreditation.  As a minimum Bidders must submit proposals setting out the following aspects of their environmental, health and safety and quality management systems:  • Proposed document management systems;  • Verification procedures for design work;  • Detailed change control procedures for each stage of the Project;  • Procedures and a programme for carrying out Project reviews; and  • Description of the procedures to coordinate and manage the design process including the interface between design teams and continuity of design team members (as set out in B10). In addition,	To Pass, Bidders will be required to demonstrate that they will adopt an acceptable approach to management systems.

		a statement of how and when design changes will be reviewed and	
		commented on by Project Co/ Service Provider.	
	B13.3	Bidders must submit propoals demonstrating that they operate an accredited Health and Safety management system complying with the OHAS 18001 standard.	
Scored 0.16	B14.1	Bidders must submit proposals setting out:  Their approach to managing the Project's design development, with particular emphasis on development post Final Tender, including proposals for interface with specific sub-groups harmonising with the current Board Project structure. The submission should include a description of the procedures to co-ordinate and manage the design process and to interface with key stakeholders, including document management, verification of design, change control during design development and design reviews; and  The management and review structures and procedures that will be put in place by the Bidder to manage potential conflicts, delays, changes in the Board's goals and other issues at each key design stage of the Project.	To Pass, Bidders will be required to demonstrate that they will adopt a robust approach to management of design development including a commitment to working with the Board.
			emphasis on development post Final Tender, including proposals for interface with specific sub-groups harmonising with the current Board Project structure. The submission should include a description of the procedures to co-ordinate and manage the design process and to interface with key stakeholders, including document management, verification of design, change control during design development and design reviews; and The management and review structures and procedures that will be put in place by the Bidder to manage potential conflicts, delays, changes in the Board's goals and other issues at each key

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
B15. Acceptable programme from appointment as Preferred Bidder to Financial Close	Pass/Fail	n/a	B15.1	Bidders must submit a week by week programme covering the contract finalisation period from appointment of Preferred Bidder until Financial Close with a detailed breakdown of the key tasks to be completed by the end of each week with the critical path and key milestones shown. Bidders shall supplement the programme with commentary on, as a minimum, the following matters:  • Mechanisms that will be adopted to ensure that the critical path for the technical, legal and commercial activities will remain on programme, and therefore that the overall Project programme is maintained;  • Confirmation of key inputs, timescales and required by dates for the Board to review/approve Bidder submissions during contract finalisation;  • Confirmation that their overall programme to Financial Close, is achievable; and  • Key risks to the Project proceeding on programme shall also be identified, with a brief commentary on how the Bidder proposes to mitigate each risk.	To Pass, Bidders will be required to submit a logical and deliverable programme.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C. Approach to Design & Construction					
C1. Clarity, robustness and quality of approach to meeting the stakeholders requirements in their design	Scored	2.64	C1.1	The Bidders must submit proposals setting out their approach to meeting the stakeholders requirements in their design.  For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. Evidence that they are sensitive to the co-location of the RHSC and DCN and that they will take advantage of this arrangement to maximise their design;  ii. Evidence that they are aware of the wide range of stakeholders associated with these departments and that they understand and will cater for all their requirements in their design;  iii. Evidence that their bid will deliver a nurturing, engaged and safe community that supports the well being of all patients, carers, families, visitors and staff;  iv. Evidence that their design will provide a healing environment that will assist the Board in its core obligation to	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				deliver clinical care to users of both the RHSC and DCN;  v. Evidence that their design will include particular consideration of the proposed external spaces, therapy gardens and landscaping, communal patient areas for example quiet and television rooms, public areas;  vi. Evidence that their design will adequately address security requirements;  vii. Evidence that their design will fully incorporate infection control requirements and HAI Scribe; and viii. In particular for the RHSC and CAMHS, we would expect the Bidders to demonstrate how the design will be developed to achieve:  i. Facilities that are a beautiful place with children and young people at the centre of a nurturing, engaged and safe community;  ii. Facilities that are reassuring, relaxing, convenient and safe with the needs of children and young people and those with disabilities expressly addressed; and  iii. Facilities that provide an	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				appropriate balance of internal and external play `areas.  In relation to the DCN, we would anticipate Bidders shall demonstrate how similar qualities to the above (ix (i – iii) but also in addition, how the design will be developed to achieve a nurturing, quiet and relaxing environment for its patients.	
C2. Clarity, robustness and quality of approach to design quality	Scored	1.85		Bidders must submit proposals setting out their approach to achieving design quality. This must be provided as set out in C2.1 – C2.3 below:	
			C2.1	Bidders must submit proposals setting out how the design will be developed to integrate the architectural, mechanical, electrical and civil and structural engineering aspects of the design to present a cohesive innovative design which meets all the Board's construction and stakeholders' requirements (including infection control and HAI Scribe requirements). The submission shall utilise all Mandatory Reference Design Requirements to deliver a solution across all disciplines.	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C2.2 C2.3	Bidders must submit proposals setting out their design analysis of both the site and the Board's requirements as depicted in the Board's Construction Requirements. The review of the site shall identify, as a minimum, opportunities, constraints and access and planning issues.  Bidders must submit proposals setting out a clear statement summarising what they understand to be the key strategic issues relating to the project and demonstrate how the design proposals have dealt with these	
				specific project issues, and any impact their proposals will have on such matters.	
C3. Clarity, robustness and quality of architectural and landscape design	Scored	2.64	C3.1	Bidders must submit proposals setting out their approach to architecture and landscape design. This should be provided as set out in C3.1 – C3.3 below:  Bidders must submit proposals setting out their approach to architecture design. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. How the design will deliver world class architectural design practice in	
				delivering Facilities that support the Board's clinical needs and a design	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				which provides a high level of creativity;  ii. How the design will provide an ordered composition of building elements in a stimulating form that successfully combines good standards of space, height, form, scale and use of materials and colours / images with associated functional requirements and the surroundings;  iii. How the design will address the interests of stakeholders, including (but not limited to) clinicians, patients (and their representatives, families and carers), health commissioners, Local Government, and the local community;  iv. How the design will deliver architectural quality and demonstrates how this will be provided;  v. How the design will deliver the lines of sight and views from windows which are suitable for children and young people;  vi. How the design will provide age and ability appropriate art and way finding design which is integrated into the design solution;  vii. How the design will fully consider all aspects of safety in all areas and a description of how risks have been removed through design innovations;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C3.2	viii. How the design will fully address control of infection and HAI Scribe; and  ix. How the design will minimise cleaning and maintenance of all elements of the Facilities by choice of materials, layout and orientation and shows how such activities can be carried out safety and without disruption to clinical activities.	
			C3.2	Bidders must submit proposals demonstrating how they will deliver high quality architectural buildings, and high quality finishes and component parts. As well as the architectural drawings and supporting information, Bidders shall provide specific details in detailed specification format to include the following:	
				<ul> <li>i. Internal and external doors and door furniture, also showing proposed pattern of vision panels;</li> <li>ii. Washing and toilet facilities;</li> <li>iii. Reception desks and touchdown bases;</li> <li>iv. Communal patient areas, which include spaces such as playrooms, television rooms and quiet rooms</li> <li>v. External therapy gardens and external</li> </ul>	
				covered play and seating areas  vi. Floor and wall coverings;  vii. Natural and artificial lighting	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				particularly in key public areas, artwork and key clinical areas such as theatres;  /iii. Samples of worktops and wall cupboards shall be provided for approval by the Board; and ix. Juxtaposition of main external finishes / cladding.	
			C3.3	Bidders must submit proposals setting out their approach to external hard and soft landscaping (including courtyards and therapy gardens) which shows how the design will be developed for therapeutic use and how it provides patient and staff access and how it enhances the environment of the Facilities. The proposals should demonstrate how the principle elements of external landscaping will be designed. to:  i. Complement the RHSC and DCN buildings and the neighbouring RIE;  ii. Minimise the risk of vandalism and crime;  iii. Facilitate security of pedestrians and avoided 'no-go' areas in their design. Ensure site safety and link with the Green Travel Plan;  iv. Minimise maintenance and operation costs;  v. Ensure easy maintenance and cleaning whilst minimising health and safety issues;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>vi. Provide appropriate fire safety routes for all users;</li> <li>vii. Incorporate SUDS and other sustainable features;</li> <li>viii. Incorporate art work; and ix. Incorporate lighting, heating, seating, canopy and wind protection arrangements which are appropriate for young children and less disabled people.</li> <li>For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) those items listed in (i) – (ix) above.</li> </ul>	
C4. Clarity, robustness and quality of approach to delivering innovation	Scored	2.64	C4.1	Bidders must submit proposals setting out their approach to delivering innovation. This should be provided as set out in C4.1 – C4.4 below:  Bidders must submit proposals setting out where it will be, or has been possible to provide innovative solutions to meet the Board's requirements. Innovation in design can range from whole concepts of hospital planning, distribution of functions etc to the building solution (e.g. use of prefabricated units) to detail design of components, materials, spaces, use of technology and art etc. Bidders must show how their design reflects current and developing innovations	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				in healthcare delivery and construction generally and translate these into an innovative building solution.	
			C4.2	Bidders must submit proposals setting out how their design, using innovation, will optimise the sustainability of the Facilities. Bidders must provide details of their strategy to show how it will optimise energy, water and utility consumption, minimise waste production, implements a strategy to meet the Board's BREEAM requirements including carbon reduction and other positive activities described in the Board's Construction Requirements to provide a sustainable development.	
			C4.3	Bidders must submit proposals setting out how an innovative approach to the provision of ICT in the Facilities in line with the Board's Construction Requirements and FM Output Specifications has been delivered.	
			C4.4	Where areas of innovation are identified Bidders must submit supporting evidence, where possible, with examples from other schemes where this has proved successful. Bidders must provide information to show the benefit, cost and risk for each innovation so the Board can assess them separately.	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C5. Clarity, robustness, and quality of approach to adaptability and flexibility.	Scored	2.64	05.4	Bidders must submit proposals setting out their approach to adaptability and flexibility. This should be provided as set out in C5.1 and C5.2 below:	
			C5.1	Bidders must submit proposals setting out an adaptability strategy which shall describe what features have been incorporated to facilitate future adaptation of use and/or expansion, technological changes, changes in national policy, national and local planning, clinical advancement and seasonal or future strategic variations in use. It is expected that particular reference shall be made to potential changes in the delivery of surgical and radio diagnostic services given the rapid evolution of developments in these disciplines. All design disciplines i.e. architectural, mechanical and electrical, structural and environmental, must be considered.	
			C5.2	Bidders must submit proposals setting out their approach to adaptability and flexibility. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. How the interior spaces may be rearranged in future if a change of use were to occur;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				ii. How the building's services and external infrastructure have been designed to allow this adaptability; iii. How the building structure and envelope, services, partitioning, ceiling, and flooring systems and construction technique has been designed to allow this adaptability; iv. How the main electrical installations can accommodate changes over and above the 25% capacity increase (requested in Section 3 Board's Construction Requirements) with minimal structure disruption; and v. How the environmental services strategy will co-ordinate with the adaptability and flexibility strategy.	
C6. Clarity, robustness and quality of way finding and signage proposals	Scored	1.06	C6.1	Bidders must submit proposals demonstrating their way finding strategy. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) how it has been developed to: i. Suit the needs of the particular patient mix for the Facilities i.e. children, young people and adults using different services, as well as staff and visitors; ii. Include internal and external signage	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				and signage outside the site boundary relevant to the Facilities. External signage shall include proposals for the wider RIE site, pedestrians, vehicles and street signage; iii. Integrate with the art strategy and lighting strategy for the Facilities; iv. Take cognisance of patient journey times and take steps to minimise such journey times; v. Minimise the transmission of microorganisms and separates clean and contaminated traffic and material streams; vi. Include hand hygiene signage; vii. Include no smoking signage; viii. Make reference to sample or exemplar site information provided by The Board; and ix. Make use of signage in the floor.	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C7. Clarity, robustness and quality of interior design proposals	Scored	2.64		Bidders shall submit their interior design proposals. This must be provided as set out in C7.1 and C7.2 below:	
			C7.1	For both the RHSC and DCN sectors of the Facilities Bidders must submit proposals setting out how their design has been developed to include:  i. Interior design proposals and illustrations for each distinct area of the Facilities, paying particular attention to the interior design solutions for public, patient and key staff areas;  ii. Communal patient areas that are light, spacious and provide a welcoming atmosphere and which are domestic in design and ambience with the main entrance being immediately apparent;  iii. Public areas which are restful, open and well lit with natural light and have views out to landscaped spaces that add quality and orientation;  iv. An open and friendly environment, that shall ensure privacy and dignity for patients, family members and visitors when required;  v. The incorporation of art in the proposals. Bidders shall provide the name(s) of the artists whom will undertake the work;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				vi. Integration with their lighting strategy and equipment strategy; vii. Integration with maintenance, cleaning, operation and sustainability; viii. Integration with way finding and signage proposals and how the way finding and signage within the RHSC and DCN links with the way finding within the existing RIE; ix. How the interior materials within the Facilities match the furniture, furnishings and equipment being procured by the Board; and x. Facilities which have a safe and secure environment which is not created via visible security features e.g. security cameras. Safety in design shall also take consideration of anti-ligature, child safety, and Child and Adolescent Mental Health Service whilst maintaining access and ambience. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) those items listed in (i) – (x) above.	
			C7.2	Bidders must submit proposals setting out how their interior design for the RHSC has been developed to provide:  i. Age and ability appropriate signage throughout the Facilities;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C7.3	<ul> <li>ii. A nurturing, relaxed and safe environment in the patient, communal and public areas; and</li> <li>iii. Furniture, windows and lines of sight which are appropriate for young children and children in pushchairs and wheelchairs.</li> <li>Bidders must submit proposals setting out how their interior design submission for the DCN provides a nurturing, quiet and relaxed environment in the patient, communal and public areas.</li> </ul>	
C8. Clarity, robustness and quality of M&E engineering design proposals	Scored	1.06	C8.1	Bidders must submit proposals setting out their approach to M&E engineering services design. This must be provided as set out in C8.1 – C8.3 below:  Bidders must submit proposals setting out the engineering services design for each element of the scheme in sufficient detail to demonstrate compliance with the Board's Construction Requirements. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. An engineering design, control and operational philosophy statement;  ii. Details of principal M&E system selections;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul><li>iii. The definition of plant areas and zones both internal and external to the Facilities; and</li><li>iv. Schematics and written proposals for major plant provision.</li></ul>	
			C8.2	Bidders must submit proposals setting out how their design will be developed to include the following:  i. Building services which support the Board's business, safety and security and life critical services under supply failure scenarios. Specific details shall be provided relating to standby facilities and mains service redundancy;  ii. An autonomous energy centre and associated plant;  iii. How temperature, ventilation and comfort for occupants will be maintained in accordance with the minimum criteria and how, if possible, these criteria will be improved;  iv. How the quality of the environment and prevention of sick building syndrome shall be ensured;  v. How mechanical and electrical design is integrated with architectural, structural and civil aspects as outlined above in C2 and C4;  vi. How sustainability has been incorporated into their design,	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				including details of the maintenance and operation philosophy for all mechanical and electrical equipment; vii. Proposals for external services, including details of the main routes (including proposed connections to existing services), intakes and off-site reliance of these services and how this interfaces with adjacent sites (this is also discussed in C18 below); viii. Details of the main source of heating energy; and ix. Details of mechanical and electrical innovations including costs as described in C4.	
				The following information should be also be provided to help demonstrate the design proposals noted above, including:  x. An environmental conditions / room provisions matrix for both mechanical and electrical services for each room in the Facilities; and  xi. Major plant life cycle statements and design life, including an explanation of the Bidder's lifecycle philosophy to support the lifecycle costing analysis completed in the technical costs proforma;	
			C8.3	Whilst Bidders are required to undertake their own design, the Board has provided a	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				draft Environmental Matrix as part of the ITPD documentation. Bidders must confirm acceptance of the Board's Environmental Matrix, highlighting any proposed changes on an exception basis.	
C9. Clarity, robustness and quality of natural and artificial lighting proposals	Scored	1.06	C9.1	Bidders must submit proposals setting out their approach to natural and artificial lighting within the Facilities. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. The balance of natural and artificial light;  ii. How the environment created by the lighting design will support the well being of patients, carers, visitors and staff;  iii. How it will be functional for clinical use;  iv. How it will produce an aesthetically pleasing environment;  v. How it will be co-ordinated with the building structure and how it will integrate with other areas e.g. mechanical and electrical design, interior design and architecture;  vi. How it will include sustainability and energy efficiency;  vii. How the interior lighting philosophy will include room usage and warning	

		signs, night lighting, security emergency	
		lighting, lighting control and wiring philosophy, standby lighting; and viii. How the external lighting philosophy will minimise light pollution for the neighbours including the RIE, assist to minimise vandalism, assist to improve security, and take account of local residents' needs.	
1.85	C10.1	Bidders must submit proposals setting out their approach to energy management. This should be provided as set out in C10.1 and C10.2 below.  Bidders must submit an energy model, complete with supporting information, demonstrating how their design solution will achieve an optimum level of energy and utility conservation (linked with the requirement for a sustainable development in C4) and show that their design fulfils the following:  i. The building energy performance will achieve a minimum of 6 credits for ENE.01 in the BREEAM assessment.  ii. The water consumption for the	
		C10.1	complete with supporting information, demonstrating how their design solution will achieve an optimum level of energy and utility conservation (linked with the requirement for a sustainable development in C4) and show that their design fulfils the following:  i. The building energy performance will achieve a minimum of 6 credits for ENE.01 in the BREEAM assessment.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				Requirements);  iii. 20% of energy is provided by renewable energy sources (Part 6 Section 3: The Board's Construction Requirements); and  iv. The inclusion of passive design strategies for ventilation and thermal control. The environmental control system is to be co-ordinated and integrated with the design of the structure and the occupied areas in order to maximise the control and flexibility of the installations.  In addition Bidders must submit an analysis of their design solution which demonstrates energy consumption proposals along with cost estimates of specific measures or innovations to be introduced.	
			C10.2	For information purposes only in addition to the model referred to above a dynamic thermal energy model is to be submitted which should comply with the parameters set out in Appendix F of the ITPD Volume 1.	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C11. Clarity, robustness and quality of equipment proposals	Scored	1.06		Bidders must submit proposals setting out their approach to equipment. This must be provided as set out in C11.1 and C11.2 below.	
proposale			C11.1	i. A commentary showing how the Group 1 Equipment scheduled by the Board varies from their own assessment of Group 1 Equipment needs. This shall be done by providing a mark-up of the Group 1 Equipment included in Equipment Schedule contained in Volume 3 of the ITPD. It should be noted that the quantity of Group 1 Equipment specified by the Board is considered to be a minimum; ii. A commentary on any aspect of the proposed equipment responsibilities regime suggested in paragraph 2.15 (Equipment) of the ITPD Volume 1. that is not considered to represent best value to the Board, and suggestions as to alternative profiles of responsibility, if any, that may enhance this; iii. A commentary setting out their proposals to select equipment suppliers and how the required level of quality is to be achieved in the equipment for which they will be	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C11.2	responsible for supplying and any improvement in the level of quality being proposed. Samples of worktops and wall cupboards shall be provided for approval by the Board to support this; and iv. Their approach to working alongside the Board to allow the Groups 2A, 2B and 3 Equipment to be installed and how this process will be managed.  Bidders must submit a fully priced Schedule of Group 1 Equipment, the total sum for which should be clearly identifiable in the Technical Cost Proforma requested at C29 below.	
C11A Compliance with minimum level of Group 1 Equipment	Pass / Fail	n/a	C11A.1	Bidders must provide confirmation that they will comply with the minimum level of Group 1 Equipment as set out in the Equipment Schedule and Equipment Responsibility Matrix.	
C12. Compliance With Mandatory Reference Design Requirements	Pass / Fail	n/a	C12.1	Bidders must submit proposals demonstrating how their design complies with the Mandatory Reference Design Requirements.	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C13.Acceptable approach to achieving planning permission	Pass / Fail	n/a	C13.1	Bidders must submit proposals setting out their approach to achieving planning permission. This must be provided as set out in C13.1 and C13.2 below.  Bidders must submit proposals demonstrating compliance including a methodology for achieving planning approval accordance with paragraph 2.17 of Volume 1 of the ITPD. This should include the following:  i. Community requirements; ii. Policy of the local planning authority; iii. Development Framework requirements; and iv. "Good neighbourliness".	To Pass, Bidders will be required to demonstrate that the granting of approvals for the scheme will be achieved
			C13.2	Bidders are required to (in conjunction with the Board) participate in planning consultation meetings with the City of Edinburgh Council regarding planning requirements. From these consultations Bidders must submit evidence to demonstrate that the granting of approvals for the scheme will be achieved in the Preferred Bidder stage and confirm any perceived obstacles / project risks (both known and unknown) in this regard shall be clearly drawn to the Board's attention.	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C14. Acceptable vertical and horizontal movement strategy	Pass / Fail	n/a	C14.1	Bidders must submit proposals setting out their vertical and horizontal movement strategy. This must be provided as set out in C14.2 – C14.3 below.  Bidders must submit proposals setting out a coherent strategy which shows how their design has been developed for managing different categories of traffic and materials within the Campus Site. This shall include the movement of people and vehicles and the distribution of supplies and waste and the separation of clean and contaminated traffic and materials during transportation,	
			C14.2	storage and at drop off points.  Bidders must submit proposals setting out how their design has been developed to minimise travel time and distances for patients, staff, and material transmission of micro-organisms either through airborne or other means to support and segregate a natural flow of pedestrian and vehicular traffic.	
			C14.3	Bidders must submit proposals setting out how their design has been developed to include a strategy for the following:  i. Wheelchair users, less able users and transportation of small children and babies that will use the Facilities;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>ii. Incorporation of fire fighting lift(s) to maintain evacuation use for the less able, small children and babies in an emergency situation; and</li> <li>iii. The route required by people and materials from the helipad, the RIE and the Facilities.</li> </ul>	
C15. Acceptable ICT strategy and Bidders proposals, compliant with Board's requirements	Pass / Fail	n/a	C15.1	Bidders must submit proposals setting out their approach to a compliant ICT strategy. This must be provided as set out in C15.1 – C15.4 below.  Bidders must submit proposals setting out their ICT strategy and demonstrating an understanding of the Board's requirements for information management and technology (M&T).	
			C15.2	Bidders must submit proposals setting out a detailed methodology demonstrating how it will ensure compliance with the Board's Construction Requirements, define clear interfaces of responsibility as necessary, and how they will take overall responsibility for the coherence and compatibility of systems such that they will operate to suit the Board's needs.	
			C15.3	Bidders must submit proposals setting out the number, location size and specification	

		C15.4	of IT / communications rooms.  Bidders must submit proposals setting out how the Board's routing, fire suppression, ventilation and connectivity to the RIE requirements has been specifically addressed.	
Pass / Fail	n/a	C16.1	Bidders must submit proposals setting out their fire planning strategy. This must be provided as set out in C16.1 and C16.2 below.  Bidders must submit proposals setting out	
			how the design will be developed to consider fire compartmentation and horizontal and vertical evacuation strategies.	
		C16.2	Bidders must submit proposals setting out how their fire planning strategy has been developed. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. The implications on staff and users in the event of a fire;  ii. A clear understanding of the policies	
F	Pass / Fail	Pass / Fail n/a	C16.1	Pass / Fail  n/a  Bidders must submit proposals setting out their fire planning strategy. This must be provided as set out in C16.1 and C16.2 below.  C16.1  Bidders must submit proposals setting out their strategic fire strategy, demonstrating how the design will be developed to consider fire compartmentation and horizontal and vertical evacuation strategies.  C16.2  Bidders must submit proposals setting out how their fire planning strategy has been developed. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. The implications on staff and users in the event of a fire;

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				polices and principles and full agreement and coordination with Lothian and Borders Fire and Rescue Service, The CEC Council's Building Control Department and the Board's Fire Officer;  iii. Compliance with: The Building (Scotland) Regulations 2004 and The Building (Scotland) Amendment Regulations 2011, SHTM 81 and SHTM 82;  iv. How a Fire Engineering solution has been developed (if it has been proposed), to what extent it has been agreed with the regulatory authorities and how the Board will not be exposed to any additional risks (programme, quality or cost) should the solution need to be amended or abandoned during the course of the development and finalisation of proposals;  v. Integration of their fire strategy with the fire strategy for the RIE Facilities to ensure they are compatible and operate in conjunction and how the fire strategy issues at the Link with the RIE Facilities are to be addressed;  vi. Details of external and internal access and circulation routes, including a safety and security statement for each element of the scheme with particular reference to the different patient types	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				using the Facilities; and vii. Details of how the particular issues in the surrounding areas of high fire risk such as the helicopter landing pad are to be addressed.	
C17. Acceptable structural design proposals	Pass / Fail	n/a		Bidders must submit proposals setting out their approach to structural design. This must be provided as set out in C17.1 - C17.3 below.	
			C17.1	Bidders must submit proposals setting out a statement of the structural design philosophy which shall demonstrate how their design has been developed including a methodology for ensuring a safe, aesthetically pleasing and durable structure.	
			C17.2	Bidders must submit proposals relating to the following elements:  i. Substructure;  ii. Structural frame solution, including grid arrangements;  iii. Ground, suspended floor slab and roof construction;  iv. External wall and internal partition construction;  v. Fire protection strategy and proposed methods to be adopted; and  vi. Methods for dealing with floor penetrations both during new build	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				works and to accommodate future potential needs.	
			C17.3	i. A schedule and/or drawings demonstrating the dead and imposed loading design criteria (both uniformly distributed and concentrated loads) adopted for all areas of the Facilities; ii. Specification of construction and materials to be utilised in the hard external works e.g. roads, pavements etc.; iii. Details of their proposals for co- ordinating structure with space requirements and distribution of services taking into account maintenance and replacement during the operational life of the buildings; iv. Details of opportunities for the future expansion of Clinical Services and Non-Clinical Services. The Bidders shall ensure that the physical arrangement of the Facilities allows for growth and change of clinical services in the future, as far as is practical for example partition moves and additional service runs both vertically and horizontally. The cost implications of structural solutions to future proof the Facility by creating 'soft spots' (refer also to C5 above) shall also be	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				included; and v. A detailed description of the design of the drainage system, taking into account matters such as the design itself, allowable discharge into the public sewers, the need or otherwise for surface water attenuation and the incorporation of drainage to existing buildings within the site drainage proposals.	
C18. Acceptable services, utilities and infrastructure proposals	Pass / Fail	n/a	C18.1	Bidders must submit proposals setting out their mains service infrastructure strategy for the site, and defines principal service routes external to the buildings. This shall also demonstrate adequacies of capacities including details of these provided by Utility providers.	
C19. Acceptable approach to achieving required BREEAM rating	Pass / Fail	n/a	C19.1	Bidders must submit proposals setting out their approach to achieving the required BREEAM rating. This must be provided as set out in C19.1 and C19.2 below.  Bidders must submit a draft BREEAM assessment of their proposals with supporting commentary. Bidders shall demonstrate how they will achieve, as a minimum, a "Very Good" rating in line with the requirements for healthcare facilities as	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			C19.2	set out in the BREEAM Scheme Document for New Construction (SD5073) 2011.  Where assumptions with respect to certain elements within these assessments have to be made (i.e. such details that would ordinarily be developed during the Preferred Bidder or post Financial Close period) the basis for these assumptions, including substantiation, must be set out in the Bidders proposals.	
C20. Acceptable post Preferred Bidder stage design development proposals and design programme	Pass / Fail	n/a	C20.1	Bidders must submit proposals setting out their approach to design development and design programme. This must be provided as set out in C20.1 and C20.2 below.  Bidders must submit proposals setting out their approach to be adopted to manage the design process (taking account of the design review procedures to be implemented). For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. Further development of 1:500, 1:200 and 1:50 design drawings and other design details and how these will be developed in conjunction with the Board's project team, user groups, specialist advisers and other project	To Pass, Bidders will be required to demonstrate clear proposals setting out a robust process, supported with a logical and deliverable programme, for the development process both up to, and beyond, Financial Close.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				stakeholders, to achieve sign off to the proposals;  ii. Further development of the specifications and engineering related drawings and how these will be developed in conjunction with the Board's project team to achieve sign off of the proposals;  iii. The anticipated level of involvement that the Board will have in the design development process, and the number of main design iterations anticipated;  iv. Outline proposals for change control, confirmation of technical queries and other design related management tools; and  v. Further development of interior design proposals to the satisfaction of the Board incorporating patient groups.	
			C20.2	Bidders must submit a design programme to Financial Close and thereafter to design completion. This shall:  i. Show the proposed programme for the development of the design drawings and specifications (supplemented by samples and models as appropriate) and other technical schedules to the NPD Project Agreement;  ii. Clearly indicate the expected number of design drawings and	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				specifications;  iii. Clearly define periods allowed for the Board's consideration of proposals; and  iv. Demonstrate how and when sign off of the Board's Construction Requirements will be achieved in this period by the Preferred Bidder, and how this sign off relates to development and sign off of Project Co Proposals.	
C21. Compliance with Board's Construction Requirements	Pass / Fail	n/a	C21.1	Bidders must confirm their compliance with the Board's Construction Requirements. If as their design has been developed there are specific areas of the Board's Construction Requirements that Bidders would seek to change, these shall be scheduled and provided in support of the statement. The Board shall not be required to accept any proposed amendments.	
C22. Acceptable design life proposals	Pass / Fail	n/a	C22.1	Bidders must submit a schedule of design life proposals against the elements listed in section 5.1 (Schedule of Life Expectancies) of the Board's Construction Requirements.	
C23. Acceptable construction	Pass / Fail	n/a		Bidders must submit proposals setting out their construction programme and approach	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
programme and approach to monitoring			C23.1	to monitoring. This must be provided as set out in C23.1 and C23.2 below.  Bidders must submit a high level programme, for the Works, comprising a network and linked bar chart programme covering all of the main and key elements of design, construction, testing, commissioning and completion and covering the period from Financial Close to Post Completion Commissioning.  The programme must include as a minimum, the following information:  i. Sequencing of activities showing logic links, restraints and constraints; ii. Key activity durations; iii. Critical paths, including the identification of critical dependencies of activities and float; iv. Key and other target milestones; v. Planning approval, and other statutory consents; and vi. Proposed Relevant Service Transfer Dates.  Bidders shall submit proposals setting out how they shall manage and monitor the programme, including their approach to minimising the effects of delays and unforeseen circumstances.	logical and deliverable construction programme supported with a robust process for programme management.

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C24. Clarity, robustness and quality of construction methodology	Scored	1.85	C24.1	Bidders must submit their construction methodology proposals. This must be provided as set out in C24.1 - C24.10 below.  Bidders must submit proposals setting out in sufficient detail how they will deliver the development including their construction strategy, proposals and method statements. Bidders shall address in detail how the Works phase of the project will be managed including a methodology covering day to day management.	
			C24.2	Bidders must submit proposals setting out in sufficient detail how they shall mitigate the egress of water, dust, debris or any microbiological contamination out of the Site and into adjacent buildings i.e. how they will ensure they are a considerate contractor.	
			C24.3	Bidders must submit proposals setting out in sufficient detail how they will follow the provisions of Sections 60 and 61 of the Control of Pollution Act 1974, with reference to the control of noise due to any demolition or construction works in particular for works adjacent to an occupied property i.e. RIE and other occupiers of the wider estate.	
			C24.4	Bidders must submit proposals setting out in	1

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				sufficient detail how they will not only adhere to legal obligations but how they will ensure that "at all times the requirements and reasonable wishes and safety of the immediate neighbours to the Campus Site (including the Royal Infirmary of Edinburgh, Little France site) are respected" with particular consideration to key locations such as A&E and operating theatres.	
			C24.5	Bidders must submit proposals to set out in sufficient detail how they will ensure that they will integrate with and not inhibit the RIE pedestrian, vehicular, cycle, service vehicular and emergency vehicular movements, access routes and parking during construction and during operation of the Facilities. The submission must set out how they will ensure site safety at all times.	
			C24.6	Bidders must submit proposals, in sufficient detail, setting out how continuity of utility supplies and operational continuity of the immediate neighbours is to be maintained at all times. The Bidders submission shall also provide outage protocols in case these safeguards fail to protect the neighbours	
			C24.7	Bidders must submit proposals, in sufficient detail, setting out a detailed methodology demonstrating their proposals for the safe and compliant disposal of surplus excavated	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				material, all building spoil, demolition waste and rubbish.	
			C24.8	Bidders must submit proposals of their site office set up. This shall describe in particular how they are to be serviced and how safe access and egress will be provided.	
			C24.9	Bidders must submit proposals setting out in sufficient detail their approach to storage of materials. This shall describe in particular how materials will be delivered to, stored, and then transferred to the Site for incorporation in the Works.	
			C24.10	Bidders must submit proposals setting out in sufficient detail their construction phasing and access methodology which shall demonstrate how the proposals have been developed to address the Site constraints and interfaces with the wider site. Bidders must include their proposals for creation of a temporary construction access over the Yellow Area (as shown on Plan 2). Bidders must submit details of location of access and methodology for its construction. This will form part of the management procedures for the Works as regards satisfying town planning matters as detailed in the ITPD. Further details are set out in paragraph 1 (Construction Access over	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				Yellow Area) of Section 1 of Part 1 of Appendix A of the Board's Construction Requirements.	
C25. Acceptable approach to commissioning and handover	Pass / Fail	n/a	C25.1	Bidders must submit proposals setting out a commissioning programme, supported by a methodology demonstrating how this will be developed and agreed in conjunction with the Board. For indicative purposes only it is anticipated that Bidders proposals may include (but shall not necessarily be limited to) how they will provide the following:  i. Management of interfaces with the Board and the Board's contractors and other parties e.g. Consort for the Link Building and obtaining such other parties consents\approvals as required;  ii. How they will carry out commissioning activities both before and after the Actual Completion Date;  iii. Access for the Board during the Works including access for equipment installation (Groups 2A, 2B and 3) and the Board's Contractors;  iv. A "zero defects" culture in order to deliver the scheme with few or no snagging items at the Actual Completion Date. Bidders shall outline a contingency plan for	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				investigating and rectifying any defects which could still occur despite all best endeavours of the Project Co. In addition proposals should be submitted outlining how snagging items will be closed out after the Actual Completion Date;  V. Facilities handover including how they shall interface and assist the Board with their decanting, familiarisation and training for the Facilities and proposals on how they shall work closely with the Board in developing an occupation plan;  vi. Facilities which are "Clinically Clean" to the satisfaction of the Board's Head of Service Infection Control. Bidders shall demonstrate within their response:  How they propose to interface with the Board's Head of Service Infection Control to agree the process and standards required to achieve the appropriate level of clinical cleanliness for each location within the Facilities; How this will be managed in terms of the sign-off of the Facility and handover process; How this will conform with HAI Scribe; and	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>Details of any specialist contractors that may be used as part of this process.</li> </ul>	
C26. Acceptable approach to quality and environmental management systems	Pass / Fail	n/a	C26.1	Bidders must submit proposals setting out their approach to construction quality and environmental management systems. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:  i. Confirmation that they will complete the Works in accordance with the requirements of BS EN ISO 9001 and 14001or any equivalent standard;  ii. Details of proposed quality assurance and environmental management systems (i.e. a system synopsis);  iii. Details of their approach to developing the quality and environmental management systems, including key dates;  iv. Where individual quality and environmental management systems of the designers, contractor, service provider and Project Co are to be used, a statement regarding how these separate systems will be integrated to form a coherent overall quality management system. For the avoidance of doubt, the Board requires Project Co (in addition to their	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				sub-contractors) to adopt and implement a compliant system;  v. Details of their approach for monitoring quality during construction (this may be by reference to a similar system implemented on a similar scheme); i.e. compliance with current revisions of BS 8000: Series "Workmanship on Building Sites, BS 5606:1990 "Guide to Accuracy in Building". and other activities based on Good Industry Practice current at the time, as a minimum;  vi. Details of their approach for auditing the quality and environmental management systems. This shall include details of the independent, internal and external audits of Project Co and its sub-contractors; and vii. A description of how the proposed systems will integrate with their strategies for risk mitigation.	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
C27. Acceptable approach to health and safety management	Pass / Fail	n/a	C27.1	Bidders must submit proposals setting out their health and safety management system. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:  i. Confirmation that they will adopt and implement an accredited health and safety management system complying with the requirements of OHAS ISO 18001. For the avoidance of doubt the Board requires that Project-Co adopt and implement a compliant system;  ii. Details of all proposed designers, sub-contractors, and suppliers confirming that they operate and accredited health and safety management system complying with OHAS 18001 standards covering all aspects of the project as applicable. Copies of current certificates from an accredited third-party assessment body showing that systems are compliant should be provided;  iii. Details of the approach for auditing designers, contractors, sub-contractors and suppliers of their health and safety management systems. This should include details	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				of internal, external and independent audits of Project-Co;  iv. Proposals for managing occupational health that will be implemented;  v. Key dates for development of the system;  vi. Safety in design and how Bidders have removed risks through design innovations;  vii. Potential constraints on their Works activities when considering the health and safety of their immediate neighbours and other members of the public that may be affected by the Works. This shall include construction traffic management plan within the Campus at Little France and restrictions on the movement of water, dust, vibration, noise and micro-organisms;  viii. How any risks to health and safety will be managed and mitigated throughout the Works;  ix. How they plan to deal with the potential occurrence of below ground services crossing the Site, in addition to the removal of other below ground obstructions that may still be present from previous demolition works;  x. Methodology for the use of	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				overhead cranes; xi. The removal of waste material; xii. Compliance with HAI Scribe; xiii. Storage, transportation and handling of gas cylinders (for construction use); and xiv. How their proposals facilitate the control and management of an outbreak and spread of infectious diseases in accordance with HTM 2025 and SHFN 30.	
C28. Acceptable approach to compliance with CDM regulations	Pass / Fail	n/a		Bidders must submit proposals setting out their approach to achieving compliance with the CDM regulations. This must be provided as set out in C28.1 and C28.2 below.	
			C28.1	Bidders must submit proposals setting out how they will comply with the requirements of the Construction (Design and Management) Regulations 2007. Particular reference shall be made to Project Co's role as Client, in addition to proposals to cover discharging the duties of CDM Coordinator, Designer and Principal Contractor under the Regulations. Bidders shall also include the methodology to demonstrate how they will deal with potential commercial and other conflicts between their constituent parts with respect to compliance with the Regulations and shall provide the following:	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul> <li>i. A competency submission for the individual who will be leading the role of CDM co-ordinator, in accordance with CDM ACOP L144 "Managing Health and Safety in Construction";</li> <li>ii. A Health and Safety document to identify how the requirements of Appendix 4 of the ACOP L144 "Managing Health and Safety in Construction" will be applied on the project;</li> <li>iii. The format of the Pre- Construction Information relating to the project to address the requirements of Appendix 2 of the CDM ACOP L144 "Managing Health and Safety in Construction";</li> <li>iv. The contents and structure of the Construction Phase Plan relating to the project to address the requirements of Appendix 3 of the CDM ACOP L144 "Managing Health and Safety in Construction";</li> <li>v. Details of the induction process to address the requirements of section 184 and 185 of the CDM ACOP L144 "Managing Health and Safety in Construction";</li> <li>vi. The format to be used for the Health and Safety File to address the requirements of section 263 of the</li> </ul>	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				CDM ACOP L144 "Managing Health and Safety in Construction"; and vii. Details of the process for managing health and safety in Design including hazard elimination and risk reduction, principles of prevention, provision of information and management of the Design process as required by the CDM ACOP L144 "Managing Health and Safety in Construction".	
			C28.2	Bidders must submit proposals setting out how they have complied with the CDM duties during the Dialogue Period and provide a design risk assessment which is to be updated as the design is progressed.	
C29. Robustness of technical costs	Pass / Fail	n/a	C29.1	Bidders must submit fully completed technical cost proformas contained in the ITPD. All information requested must be provided. Bidders' completed proformas shall be provided in the same MS Excel format to allow direct comparison between bids.	To Pass, Bidders will be required to demonstrate that their technical costs are robust for the scope of works to be delivered.
C30. Acceptable list of summary assumptions, clarifications and derogations	Not Scored	n/a	C30.1	Bidders must submit a consolidated schedule of all assumptions, clarifications and qualifications made in respect of their ITPD Bids. Whilst it is encouraged that such references are also made in the	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				appropriate locations throughout Bidders' submissions, it is a mandatory requirement of the ITPD Submission that all such matters are also summarised in a single location.	
C31. Acceptable Interface Proposals	Pass / Fail	n/a	C31.1	Bidders must submit proposals setting out their approach to meeting the interface issues as described in Appendix A of the Board's Construction Requirements (subject to the conditions set out in Clause 9 (Nature of Land Interests) including without limitation Schedule Part 5 (Land Matters) of the NPD Project Agreement).	

## Appendix AP1.1 - Design Deliverables

## **Appendix**

**AP1.1** 

### **Design Deliverables**

Bidders shall provide the following design submission requirements (as given in the Volume 1 of the ITPD):

### 1. Project Overview

1.1 - Bid Drawings Schedule

#### 2. Approach to Design & Construction - Architectural & Landscaping Design

- 2.1 Architectural Drawings Schedule
- 2.2 Outline Architectural Specification supporting the design concept and setting out the proposed materials, finishes and components to be used. Outline Specification shall be included for all components as detailed in the BCIS Elemental Analysis
- 2.3 Development Control Plan
- 2.4 1:1000 Site Plans
- 2.5 1:500 Location/Site Plan
- 2.6 1:200 Site Layouts
- 2.7 Landscaping Proposal Specifications
- 2.8 Landscaping Proposal Drawings
- 2..9 1:200 Architectural general arrangement floor plans, sections and elevations
- 2.10 1:500 Architectural departmental adjacencies
- 2.11 1:100 Architectural elevations including building elevation/facade showing appropriately rendered:-fenestration, exterior materials, louvers and cast shadows
- 2.12 1:100 Architectural sections denoting floor to ceiling heights, suspended ceilings, raised access floors and floor levels
- 2.13 1:100 Departmental and 1:50 room layouts
- 2.14 1:200 Architectural drawings detailing (I) movement strategy, (ii) user flow diagrams at all principal circulation locations, (iii) movement interfaces and (iv) analysis of key nodal points.
- 2.15 1:50 Architectural sections through Roof and Plant Room

- 2.16 1:100 Architectural proposals relative to the clinical requirements and infection control.
- 2.17 1:200 Architectural drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.
- 2.18 DDA Proposals including drawings, analysis and proposals.
- 2.19 AEDET assessment drawings
- 2.20 1:50 Architectural design response detailing interfaces with existing RIE
- 2.21 1:100 Architectural drawings and visualisations for the Pod proposals
- 2.22 1:50 Architectural elevations and visualisations showing the Entrances

### 3. Approach to Design & Construction - Interior Design Proposals

- 3.1 Quality, appropriateness and proposals for RHSC interior design supported by architectural drawings of how the layout and the design proposed addresses:
  - 3.1.1 Signage
  - 3.1.2 Patient, communal and public areas
  - 3.1.3 Appropriateness of facilities for users
- 3.2 Loaded 1:50 room layout drawings for the RHSC indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.
- 3.3 Quality, appropriateness and proposals for DCN interior design supported by architectural drawings of how the layout and the design proposed addresses:
  - 3.3.1 Signage
  - 3.3.2 Patient, communal and public areas
  - 3.3.3 Appropriateness of facilities for users
- 3.4 Loaded 1:50 room layout drawings for the DCN indicating interior design proposals and demonstrating the coordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.
- 3.5 Internal Perspectives at eye level that demonstrate form and setting of the key internal architectural areas,

- distinguishing or innovative features which demonstrate the design quality of the proposals
- 3.6 Drawings and visualisations to demonstrate the integration of Artwork into the interior design concept.
- 3.7 Sample boards to demonstrate the proposed interior finishes, colour and textures. Boards to include RHSC and DCN wards, the Pod, Atrium and CAMHS.

### 4. Approach to Design & Construction - Civil & Structural Proposals

- 4.1 Structural Drawings Schedule
- 4.2 Civil Engineering Drawings Schedule
- 4.3 Outline Structural Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components as in accordance with the NBS Specification
- 4.4 1:500 Site plan layout indicating all manholes, gully positions for all site drainage
- 4.5 1:500 Site plan layout indicating all positions for surface water drainage
- 4.6 1:500 Site plan layout indicating all positions for foul water drainage
- 4.7 1:500 Site plan layout indicating all positions for water mains
- 4.8 1:500 Site plan layout indicating all positions for roads, footpaths and finished levels
- 4.9 1:100 structural general arrangement foundation plans
- 4.10 1:100 structural general arrangement plans including floor and roof plans indicating all column and beam locations and sizes and all structural elements
- 4.11 1:100 structural sections through the building showing structural elements and service zones
- 4.12 Confirmation of Geotechnical surveys, reports, studies undertaken in addition to the Geotechnical survey in the data room
- 4.13 Confirmation of other site surveys, reports, studies undertaken in addition to the information already located in the data room
- 4.14 Confirmation of any vibration monitoring / prevention proposals.
- 4.15 1:100 drawings for Helipad
- 4.16 Outline Structural Specification supporting the Helipad design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification

#### 5. Mechanical & Electrical Services

- 5.1 Building services (mechanical) drawings schedule
- 5.2 Building services (electrical) drawings schedule
- 5.3 Outline Building services (mechanical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification
- 5.4 Outline Building services (electrical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification
- 5.5 1:500 site plan layout indicating all mechanical services, utilities supplies, natural gas mains, water supply and fire mains
- 5.6 1:500 site plan layout indicating all electrical utilities supplies, electrical mains, data and communications ducts
- 5.7 1:200 internal services concept schematic and zoning plans for both heating and ventilation; indicating of heating and ventilation in each room
- 5.8 1:100 mechanical general arrangement floor plans showing extent of services, distribution routes, mechanical plant acoustic treatment, plant areas, etc
- 5.9 Mechanical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed :
  - 5.9.1 Plant strategy
  - 5.9.2 Distribution strategy
  - 5.9.3 Incoming gas and water services (including metering and sub-metering)
  - 5.9.4 Environmental design considerations
  - 5.9.5 Heat sources
  - 5.9.6 Natural Ventilation strategy
  - 5.9.7 Mechanical Ventilation strategy
  - 5.9.8 Mechanical cooling
  - 5.9.9 Mechanical air conditioning

- 5.9.10 Specialist ventilation strategy
- 5.9.11 Domestic hot and cold water system
- 5.9.12 Space Heating System
- 5.9.13 Space Cooling System
- 5.9.14 Building Energy and Management System
- 5.9.15 Dry Risers
- 5.9.16 Soil and Waste System (above and underground)
- 5.9.17 Rainwater pipework and distribution
- 5.9.18 Specialist drainage
- 5.9.19 Sanitary ware and appliances
- 5.9.20 Dry Risers
- 5.9.21 Natural Gas Installations including Laboratory Gases
- 5.9.22 Medical Gas Installations
- 5.9.23 Pneumatic Tube System
- 5.9.24 Mechanical Commissioning Strategy
- 5.10 1:100 electrical general arrangement floor plans showing extent of services, distribution routes, plant areas, etc
- 5.11 Electrical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed:
  - 5.11.1 Incoming electrical services
  - 5.11.2 Metering and Sub-metering
  - 5.11.3 Mains distribution including standby generation facilities
  - 5.11.4 Earthing, Bonding and Lightning protection
  - 5.11.5 Containment systems
  - 5.11.6 Small power installation
  - 5.11.7 Lighting and Emergency Lighting

- 5.11.8 Specialist lighting
- 5.11.9 Lighting control systems
- 5.11.10 Uninterruptible Power Supplies
- 5.11.11 Telecommunications and I.T.
- 5.11.12 Nurse Call System
- 5.11.13 Fire Detection and Suppression System
- 5.11.14 Staff Attack / Induction Loop
- 5.11.15 Security system
- 5.11.16 Access Control system
- 5.11.17 CCTV system
- 5.11.18 Public address system
- 5.11.19 Digital TV and Radio Installation
- 5.11.20 Patient / Equipment Tagging
- 5.11.21 Induction Loop
- 5.11.22 Bedhead Services
- 5.11.23 Electrical Commissioning Strategy
- 5.12 1:50 mechanical and electrical services sections to illustrate use of ceilings, natural daylight, ventilation strategies, cooling and heating strategies, lighting strategy, acoustic strategy, specialist installations strategy, services concept

#### 6. Lift Provisions

- 6.1 Lift and Escalator Drawings Schedule
- 6.2 Outline Building Services (lift and escalator provision) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification. Traffic flow analysis to be included.

### 7. Environmental Services and Energy Management Strategy

7.1 - Natural Ventilation drawings and proposals

## 8. Fire Strategy

- 8.1 1:100 Fire Strategy drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.
- 8.2 Outline Fire Strategy Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification

## 9. Security Strategy

- 9.1- 1:100 Security drawings in support of security strategy and how the security proposals support the design concept
- 9.2 Outline Security Specification supporting the design concept including proposed materials and components to be used.

  Outline Specification shall be included for all components in accordance with the NBS Specification

#### 10. Acoustic Strategy

10.1 - Outline Acoustic Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification

#### 11. Adaptability, Flexibility and Expandability Strategy

- 11.1 Architectural adaptability drawings in support of the overall adaptability strategy.
- 11.2 Strategy and drawings showing how the design of the new RHSC and DCN demonstrates innovation, flexibility, consideration of whole life design and is capable of absorbing reasonable change in the future without excessive public, patient or clinical disruption.

# AP1.2 Specifications

Bidders shall provide specific details on their proposed suite of specifications for the Works. These details shall include, but not be limited to the following:

- i. The industry recognised specifications proposed, with specific commentary on the extent of application of those to each main discipline (civil / structural, M&E, architectural etc);
- ii. Inclusion of either Project specific specifications for each main discipline, or example specifications used on other projects that are representative of the level of detail and clearly demonstrate the proposed level of quality that will apply to this scheme: and
- iii. A statement confirming that all such specifications (including fully completed framework specifications) will be fully drafted by the Preferred Bidder prior to Financial Close.

For the avoidance of doubt, the Board is expecting Bidders to adopt both general, and where required, specific specifications to cover all components, materials, workmanship etc. For example the NBS framework could be utilised for mainstream building elements, however may need to be supplemented by specific standards and specifications relevant to particular Bidder proposals (e.g. piling, steelwork erection, infrastructure works).

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
D. Approach to Facilities Management					
D1. Clarity, robustness and quality of approach to management and administration of the Services and Contract	Scored	2.50	D1.1	Bidders must submit proposals setting out their proposed approach to managing and administering both the Services and the NPD Project Agreement itself. The Bidder is also required to provide a detailed proposal for the management, liaison and interfacing with the Board and the other Board service providers, these being Authority Parties.  The importance to the Board of a holistic approach to the delivery of Services under the NPD Project Agreement cannot be overstated. The success of this will be dependent upon the quality of the general management of the Project.  Bidders must submit the following:  i. Full Method Statements for the management and administration of the Project Agreement and Services contained therein;  ii. Location of the members of Project Co's administration team (i.e. on or off site);  iii. Details of Bidder's proposed managerial structure, indicating the roles and responsibilities of each manager, supervisor and team member;  iv. Details of how material changes to the management structure of Project Co will be	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				communicated to the Board; v. Details of how changes to working practices and / or Service delivery timings will be communicated to the Board; and vi. Details of how it is proposed to electronically manage Services management and administration to improve delivery.	
D2. Acceptable approach to integration with Board policies and operation	Pass / Fail	n/a	D2.1	Bidders must submit proposals setting out how they will comply, integrate and align their methodologies with the Board's policies, operation and procedures for the delivery of Services to the Facilities. This must include the following:  i. Details of how it will ensure that the Services are delivered in accordance with the requirements of the Health planning Standards/NHS Requirements as detailed within paragraph 2.3 of Volume 3 of the ITPD.	
D3. Acceptable approach to ensuring quality management	Pass / Fail	n/a	D3.1	Bidders must submit proposals setting out their Method Statements for quality management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. Description of any quality management systems or policies the Bidder has for the Services or would put in place for the Services;  ii. Interface with the Board's Quality	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				Assurance representatives  iii. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate;  iv. Proposals for carrying out audits, including the provision of their proposed audit programme for the Services; and  v. Details of the Bidder's proposals for the escalation of activities following a major incident including interface with the Board.	
D4. Acceptable approach to ensuring environmental management	Pass / Fail	n/a	D4.1	Bidders must submit proposals setting out their Method Statements for environmental management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. Interface with the client's environment representatives;  ii. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate;  iii. Details of their approach to ISO 14001 and shall describe any relevant experience of implementing such systems for other local authority or NHS clients of the Bidder;  iv. Bidder's environmental policy statement, and shall state explicitly whether they have, or	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				are working towards developing an environmental strategy;  v. Bidder's environmental management system, for their own organisation and/or for this project;  vi. Structure of the environmental management system;  vii. Details of the Bidder's approach and commitment to use of ethical and sustainable materials;  viii. Proposals for carrying out audits, including the provision of an indicative audit programme for the Services; and ix. Details of the Bidder's proposals for the escalation of activities following a major incident, including interface with the Board.	
D5. Acceptable approach to ensuring health and safety management	Pass / Fail	n/a	D5.1	Bidders must submit proposals setting out their Method Statements for health and safety management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. Procedure for disseminating hazard and safety warnings;  ii. Methodology for the development and maintenance of the health and safety system relevant to the Services;  iii. Interface with the Board's health and safety representatives;  iv. Process for maintaining effective overall control of all site activities and the	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				coordination of and liaison with all staff such that there are suitable integrated arrangements to allow compliance with the Health and Safety at Work Act 1974;  v. Process to ensure that Project Co's advisers are continually aware of any relevant legislative changes and procedures for communicating these changes to the Board as appropriate:  vi. Process to ensure constant access to health and safety professionals for both its own staff and the Board's nominated representatives;  vii. Develop bespoke risk assessments recognising the services being delivered at the RIE and University on the wider Campus.  viii. A copy of the Bidder's Health and Safety policy and a description of their approach to ISO 9001 and ISO 18001 or similar systems; ix. Proposals for carrying out audits, including the provision of an indicative audit programme for the Services; and  x. Details of their proposals for the escalation of activities following a major incident including interface with the Board.	
D6. Acceptable approach to interfacing with the Board for undertaking	Pass / Fail	n/a	D6.1	Bidders must submit proposals setting out their approach to interfacing with the Board for undertaking works outside of access times. This must include the following:  i. How they will ensure that any Works and	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
works outside of access times				Services proposed to be undertaken outside agreed Access Times are agreed with the Board's Representative prior to commencement; and ii. How Works and Services will be managed and carried out in accordance with Permit to Work System.	
D7. Clarity, robustness and quality of approach to partnership and resources	Scored	2.50		Bidders must submit proposals setting out their approach to partnership and resources including liaison, resources and supply chain management. This must be provided as set out in D7.1 – D7.3 below.	
including liaison, resources and supply chain management			D7.1	Bidders must submit proposals setting out their approach to communications with the Board or its representatives. This shall include their proposed appropriate interfaces, frequency, nature and structure of meetings and reporting.	
			D7.2	Bidders must submit proposals setting out:  i. Details of storage, maintenance and disposal of plant, equipment, materials, consumables, packaging and chemicals used in the delivery of the Services;  ii. Details of suitably qualified staff and availability to meet the requirements of this NPD Project Agreement.	
			D7.3	Bidders must submit proposals setting out: i. Details of how the supply chain will be managed;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				<ul><li>ii. Proposed approach to delivery of Services through the supply chain;</li><li>iii. Method of creating a successful integrated Services team.</li></ul>	
D8. Acceptable approach to business continuity planning	Pass / Fail	n/a	D8.1	Bidders must submit proposals setting out their approach to business continuity planning. This must include the following:  i. Details of its approach to business continuity planning including:  a. Its approach to the creation and maintenance of its own business continuity plan and disaster recovery plans for the required Services;  b. The proposed approach to supporting the Board's "Business Continuity; and  c. Details of who within the management team will have overall responsibility for business continuity.  ii. Details of its proposed training procedures for staff who will participate in emergency procedures;  iii. Details of its proposals for testing Business Continuity Plans at the property;  iv. Details of its proposals for the escalation of activities following a major incident (and\ or at the request of the Board);  v. Details of its own, internal Business Continuity (e.g. those plans related to its own survival as a business following a major incident); and	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				vi. Details of the existing arrangements for testing its own, internal Business Continuity Plans.	
D9. Acceptable fire safety policies and procedures	Pass / Fail	n/a	D9.1	Bidders must submit proposals setting out their approach to fire safety policies and procedure. This must include the following:  i. Details of its fire safety policy  ii. Details of fire safety and security systems and procedures to be implemented on site including their approach to the Helipad.  iii. Approach to ensuring an integrated fire safety strategy for the overall site, including appropriate interfaces with the Board and other Third Party organisations i.e. Authority Parties.	
D10. Clarity, robustness and quality of approach to performance and information management including; helpdesk, programme maintenance lifecycle, performance monitoring,	Scored	4.50	D10.1	Bidders must submit proposals setting out their approach to performance and information management, This must be provided as set out in D10.1 – D10.8 below.  Bidders must submit proposals setting out details of their proposed computer-aided facilities management (CAFM) system and how they will provide an asset management and reporting capability. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:  i. Call receipt and management and	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
monitoring and records, regular reports and information requests, building services and statutory testing				escalation; ii. Management information; iii. Reporting; iv. Incident management; v. Alarm management; vi. Maintenance scheduling; vii. Asset data maintenance; viii. Helpdesk interface protocol with the Board and/or third party's; ix. Proposed staffing and location of the helpdesk; x. Interface between the helpdesk and other aspects of the CAFM system; xi. Reporting procedures and frequency of reporting; and xii. Enabling the Board to gain access to the data held within the BMS in a format/ method agreeable to the Board.	
			D10.2	Bidders must submit proposals setting out their approach to programme maintenance lifecycle. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. The information and delivery strategy which will be utilised in establishing a Programmed Maintenance planner;  ii. Confirmation that the Bidder recognises that certain works will need to be undertaken out of normal working hours/ during the	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				weekends to minimise the impact on the Board's operations, and without additional cost to the Board;  iii. Method of establishing and updating their 5-year Maintenance Lifecycle plan;  iv. Details on the provision of all specialist subcontractors for programmed maintenance and lifecycle;  v. Details of how it will ensure that the delivery of all Services will underpin the required hygienic/infection control standards for the facility, specifically compliance with HAI Scribe standards;  vi. Details on staffing and management of the Service;  vii. Details on how planned, reactive and statutory works are to be monitored for both quality and safe methods of work. This should include works that are undertaken by directly employed staff and any subcontractors;  viii. Details of proposals to assess staff roles and responsibilities, skill requirements, competency, training arrangements and review procedures;  ix. Details on its approach to planned, reactive and statutory maintenance including prioritising business critical equipment and systems at all premises together with details on how any planned maintenance that is not achieved by the planned date is addressed;  x. Sample of proposed Service Report to be used for this Contract;	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				xi. Details on interface with Board's cleaning service when carrying out Programmed Maintenance; xii. Schedule for cleaning of all internal and external panes of glazed areas of the Facilities envelope; and Schedule of planned external façade cleaning service.	
			D10.3	Bidders must submit proposals setting out details of their proposed delivery strategy and key activities. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following service areas:  i. Mechanical maintenance ii. Electrical maintenance iii. Plumbing iv. Lift maintenance v. Fire safety system/ equipment vi. Internal / external fabric of the Facilities vii. Periodic electrical testing and inspections viii. Lift inspections ix. Pressure vessel x. Pressure systems (written schemes) xi. Water systems risk assessments xii. Fire risk assessments xiii. Water sampling / testing	
			D10.4	Bidders must submit proposals setting out their approach to performance monitoring. This must include the following:  i. Description of how the performance of the	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				Service will be self-monitored; ii. Approach to customer feedback and complaints handling; iii. Sample customer feedback form.	
			D10.5	Bidders must submit proposals setting out their approach to monitoring and records. This must include the following:  i. Details on how the Bidder will ensure all certificates, appropriate documentation and records in relation to the Project are stored in accordance with appropriate legislation and the Board's policies; and  ii. Details on how the Bidder will ensure all records in relation to the Project are maintained accurately and kept up-to-date.	
			D10.6	Bidders must submit proposals setting out their approach to regular reporting and information request. This must include the following:  i. Procedures for ensuring that the reports are appropriately tailored to the Boards requirements, including the completion period for such reports;  ii. Details on how it will ensure that reports are accurate and produced in line with agreed timescales;  iii. Details of the types of reports that they are currently producing for other clients.	
			D10.7	Bidders must submit proposals setting out their approach to building services. This must include	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				the following:  i. Approach to commissioning new Plant and Equipment;  ii. Details on how hardware and software licenses will be kept up to date;  iii. Details on how to ensure all Equipment/ Assets used in the delivery of the Services are maintained properly and safe to use.	
			D10.8	Bidders must submit proposals setting out their approach to statutory testing.	
D11. Acceptable approach to unprogrammed maintenance	Pass / Fail	n/a	D11.1	Bidders must submit proposals setting out their approach to Un-programmed Maintenance Works. This must include the following: i. Meeting the relevant Rectification Period; and ii. Meeting the standards required.	
D12. Clarity, robustness and quality of approach to service elements including; utilities management and grounds maintenance services	Scored	2.50	D12.1	Bidders must submit proposals setting out their approach to service elements including utilities management and grounds maintenance. This must be provided as set out in D12.1 and D12.2 below.  Bidders must submit a detailed methodology describing their approach to utilities management. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following:  i. Proposals to ensure an adequate continuous	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
			D12.2	supply of energy is available; ii. Proposals for interface with the Board to ensure no interruptions in the supply of Utilities to the Facilities; iii. Proposals for procurement of Utilities for the Board which demonstrate value for money; iv. Maintenance approach to ensure all external Utility infrastructures within the Site is fully functional; v. Method of monitoring Utilities/carbon consumption and how usage will be analysed and used; vi. Sample Utility consumption report; vii. Proposals for improving energy/ carbon efficiency; and viii. Details on Utility energy profile audit.  Bidder must submit proposals setting out their approach to grounds maintenance. For indicative purposes only it is anticipated that Bidders proposals may include (but should not necessarily be limited to) the following: i. Methodology for Grounds Maintenance Service and indicative programme for Planned Maintenance; and ii. Interface with third parties in ensuring a holistic approach to the safe use of the Campus access and egress routes.	
D13. Robustness of technical costs	Pass / Fail	n/a	D13.1	Bidders must submit fully completed technical cost proformas for the Services contained in the ITPD. All information requested must be	To Pass, Bidders will be required to demonstrate that their technical costs are robust for the scope of

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement	Pass / Fail Guidance
				provided. Bidders' completed proformas shall be provided in the same MS Excel format to allow direct comparison between bids.	works to be delivered.
D14. Acceptable list of summary assumptions, clarifications and derogations	Not Scored	n/a	D14.1	Bidders must submit a consolidated schedule of all assumptions, clarifications and qualifications made in respect of their ITPD Bids. Whilst it is encouraged that such references are also made in the appropriate locations throughout Bidders' submissions, it is a mandatory requirement of the ITPD Submission that all such matters are also summarised in a single location.	
D15. Acceptable approach to mobilisation of Facilities Management services	Pass / Fail	n/a	D15.1	Bidders must submit proposals setting out their approach to mobilisation of facilities management services. For indicative purposes only it is anticipated that Bidders proposals must include (but should not necessarily be limited to) the following:  i. A draft mobilisation plan using MS Project showing the activities to be performed, interdependencies between activities, the allocation of resources and where Board input is required;  ii. Details of their proposed structuring and resourcing for mobilisation. This should include the names and CVs of the	

Quality Evaluation Criteria & Reference	Quality Evaluation Basis	Quality Evaluation Criteria Weighting	Submission Requirement Reference	Submission Requirement Pass / Fail Gu	ıidance
				iii. Details of proposed communications with the Board during mobilisation. This shall propose appropriate interfaces and the frequency, nature and structure of meetings and reporting;	
				iv. Approach to recruitment of staff, including as appropriate relevant security clearances;	
				v. Detailed proposals for the establishment of the Helpdesk service that clearly demonstrates an understanding of the operational and technical interfaces with Board Services;	
				vi. Proposals for installation and population of the CAFM system describing (as applicable) how installation shall be effected and how data will be migrated and tested; and	
				vii. Method of vetting staff and acquiring the necessary and appropriate security clearances.	

## Annex 1 to Appendix A – Technical Cost Proforma

Design and Construction and FM Technical Cost Proforma.

### Annex 2 to Appendix A - Design Deliverables Proforma

## Re-provision of RHSC and DCN at Little France

### Schedule of Design Deliverables for Technical Meetings during the Dialogue Period

#### Instructions to Bidders:

- 1. The design deliverables listed below are those scheduled in Section C (Appendix AP1.1 & AP1.2) of the Submission Requirements detailed in Appendix A (ii) of Volume 1 of the ITPD.
- 2. Bidders shall complete the table below to indicate what drawings they will submit at each Dialogue Meeting in support of the Submission Requirements. This is in addition to each disciplines drawing schedule.
- 3. All drawings must be submitted during the Dialogue Period prior to submission of the Draft Final Tender.
- 4. The Final Tender shall include the design deliverables developed to RIBA Plan of Work Stage D.

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
AP1.1									
	1	Project Overview							
	1.1	Bid Drawings Schedule						✓	✓
	2	Approach to Design & Construction - Architectural and Landscaping Design							
	2.1	Architectural Drawings Schedule						<b>✓</b>	✓
	2.2	Outline Architectural Specification supporting the design concept and setting out the proposed materials, finishes and components to be used. Outline Specification shall be included for all components as detailed in the NBS Specification						✓	<b>*</b>
	2.3	Development Control Plan						✓	<b>✓</b>
	2.4	1:1000 Site Plans						✓	✓
	2.5	1:500 Location/Site Plan						✓	✓
	2.6	1:200 Site Layouts						✓	✓
	2.7	Landscaping Proposal Specifications						✓	✓
	2.8	Landscaping Proposal Drawings						<b>✓</b>	✓
	2.9	1:200 architectural general arrangement floor plans, sections and elevations						<b>√</b>	✓
	2.10	1:500 architectural departmental adjacencies						✓	✓
	2.11	1:100 architectural elevations including building elevation/facade showing appropriately rendered:- fenestration, exterior materials, louvres and cast shadows						✓	<b>✓</b>
	2. 12	1:100 architectural sections denoting floor to ceiling heights, suspended ceilings, raised access floors, floor levels						✓	<b>√</b>
	2. 13	1:100 departmental layouts and 1:50 room layouts						✓	<b>✓</b>
	2. 14	1.200 Architectural drawings detailing (i) movement strategy, (ii) user flow diagrams at all principal circulation locations, (iii) movement interfaces and (iv) analysis of key nodal points.						<b>√</b>	✓
	2.15	1:50 architectural sections through Roof and Plant Room						✓	<b>✓</b>
	2.16	1:100 architectural proposals relative to the clinical requirements and infection control.						✓	<b>✓</b>
	2.17	1:200 architectural drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code.						<b>√</b>	<b>✓</b>
	2.18	DDA Proposals including drawings, analysis and proposals.						✓	<b>✓</b>
	2.19	AEDET assessment drawings						✓	✓
	2.20	1:50 Architectural design response detailing interfaces with existing RIE						✓	<b>√</b>

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	2.21	1:100 Architectural drawings and visualisations for the Pod proposals						✓	✓
	2.22	1:50 Architectural elevations and visualisations showing the Entrances						✓	<b>✓</b>
	3	Approach to Design & Construction - Interior Design Proposals							
	3.1	Quality, appropriateness and proposals for RHSC interior design supported by architectural drawings of how the layout and the design proposed addresses:							
	3.1.1	- Signage						✓	✓
	3.1.2	- Patient, communal and public areas						✓	<b>✓</b>
	3.1.3	- Appropriateness of facilities for users						✓	✓
		Loaded 1:50 room layout drawings indicating interior design proposals and demonstrating the co-ordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.						✓	<b>√</b>
	3.2	Quality, appropriateness and proposals for DCN interior design supported by architectural drawings of how the layout and the design proposed addresses:							
	3.2.1	- Signage						✓	<b>✓</b>
	3.2.2	- Patient, communal and public areas						✓	✓
	3.2.3	- Appropriateness of facilities for users						✓	✓
	3.3	Loaded 1:50 room layout drawings indicating interior design proposals and demonstrating the co-ordinating aspects of all design disciplines, including floors, walls, ceilings, façade ventilation, mechanical and electrical services.						✓	<b>√</b>
	3.4	Internal Perspectives at eye level that demonstrate form and setting of the key internal architectural areas, distinguishing or innovative features which demonstrate the design quality of the proposals.						✓	<b>~</b>
		Drawings and visualisations to demonstrate the integration of Artwork into the interior design concept						✓	<b>✓</b>
		Sample boards to demonstrate the proposed interior finishes, colours and textures. Boards to include RHSC and DCN Wards, the Pod, Atrium and CAMHS.						<b>√</b>	<b>✓</b>
	4	Approach to Design & Construction - Civil & Structural Proposals							
	4.1	Structural Drawings Schedule						✓	✓
	4.2	Civil Engineering Drawings Schedule						✓	✓
	4.3	Outline Structural Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS specification						✓	<b>✓</b>

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	4.4	1:500 Site plan layout indicating all manholes, gully positions for all site drainage						✓	✓
	4.5	1:500 Site plan layout indicating all positions for surface water drainage						<b>√</b>	<b>1</b>
	4.6	1:500 Site plan layout indicating all positions for foul water drainage						✓	<b>~</b>
	4.7	1:500 Site plan layout indicating all positions for water mains						✓	~
	4.8	1:500 Site plan layout indicating all positions for roads, footpaths and finished levels						✓	<b>√</b>
	4.9	1:100 structural general arrangement foundation plans						✓	<b>✓</b>
	4.1	1:100 structural general arrangement plans including floor and roof plans indicating all column and beam locations and sizes and all structural elements						✓	<b>1</b>
	4.11	1:100 structural sections through the building showing structural elements and service zones						✓	<b>√</b>
	4.12	Confirmation of Geotechnical surveys, reports, studies undertaken [in addition to the Geotechnical survey in the data room						✓	<b>*</b>
	4.13	Confirmation of other site surveys, reports, studies undertaken [in addition to the information already located in the data room						✓	<b>✓</b>
	4.14	Confirmation of any vibration monitoring / prevention proposals.						✓	<b>√</b>
	4.15	1:100 drawings for the Helipad						✓	<b>✓</b>
	4.16	Outline Structural Specification supporting the Helipad design concept including proposed materials and components to be used. Outline specification shall be included for all components in accordance with the NBS specification.						✓	<b>✓</b>
	5	Mechanical & Electrical Services							$\perp$
	5.1	Building services (mechanical) drawings schedule						✓	<b>√</b>
	5.2	Building services (electrical) drawings schedule						<b>√</b>	<b>V</b>
	5.3	Outline Building services (mechanical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	•
	5.4	Outline Building services (electrical) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	<b>*</b>
	5.5	1:500 site plan layout indicating all mechanical services , utilities supplies, natural gas mains, water supply and fire mains						<b>√</b>	<b>1</b>
	5.6	1:500 site plan layout indicating all electrical utilities supplies, electrical mains, data and comms ducts						✓	<b>✓</b>
	5.7	1:200 internal services concept schematic and zoning plans for both heating and ventilation; indicating of heating and ventilation in each room						✓	<b>1</b>

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	5.8	1:100 mechanical general arrangement floor plans showing extent of services, distribution routes, mechanical plant acoustic treatment, plant areas, etc.						<b>✓</b>	<b>✓</b>
	5.9	Mechanical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed :						✓	<b>✓</b>
	5.9.1	- Plant strategy						✓	✓
	5.9.2	- Distribution strategy						✓	✓
	5.9.3	- Incoming gas and water services (including metering and sub-metering)						✓	✓
	5.9.4	- Environmental design considerations			·			✓	✓
	5.9.5	- Heat sources						✓	✓
	5.9.6	- Natural Ventilation strategy						✓	✓
	5.9.7	- Mechanical Ventilation strategy						✓	✓
	5.9.8	- Mechanical cooling						✓	✓
	5.9.9	- Mechanical air conditioning						✓	✓
	5.9.10	- Specialist ventilation strategy						✓	<b>√</b>
	5.9.11	- Domestic hot and cold water system						✓	<b>✓</b>
	5.9.12	- Space Heating System						✓	<b>√</b>
	5.9.13	- Space Cooling System						✓	<b>✓</b>
	5.9.14	- Building Energy and Management System						<b>✓</b>	1
	5.9.15	- Dry Risers						✓	<b>✓</b>
	5.9.16	- Soil and Waste System (above and underground)						✓	<b>√</b>
	5.9.17	- Rainwater pipework and distribution						<b>√</b>	1
	5.9.18	- Specialist drainage						<b>✓</b>	1
	5.9.19	- Sanitary ware and appliances						<b>✓</b>	<b>✓</b>
	5.9.20	- Dry Risers						<u> </u>	1
	5.9.21	- Natural Gas Installations including laboratory gases						<u>·</u>	·
	5.9.22	- Medical Gas Installations - Medical Gas Installations						· /	1
	5.9.23	- Pneumatic Tube System						· · · · · · · · · · · · · · · · · · ·	, , , , , , , , , , , , , , , , , , ,
	5.9.24	- Mechanical Commissioning Strategy						<b>✓</b>	<b>✓</b>
	5.10	1:100 electrical general arrangement floor plans showing extent of services,						· /	1
		distribution routes, plant areas, etc							·
	5.11	Electrical schematic layouts and report (co-ordinated and consistent with all drawings and design information contained within the Bid Submission Requirements) denoting details and extent of proposed :						✓	<b>✓</b>
	5.11.1	- Incoming electrical services						✓	✓
	5.11.2	- Metering and Sub-metering						✓	✓
	5.11.3	- Mains distribution including standby generation facilities						✓	✓
	5.11.4	- Earthing, Bonding and Lightning protection						✓	✓
	5.11.5	- Containment systems						✓	✓
	5.11.6	- Small power installation						✓	✓
	5.11.7	- Lighting and Emergency Lighting						✓	✓
	5.11.8	- Specialist lighting						✓	✓

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	5.11.9	- Lighting control systems						✓	✓
	5.11.10	- Uninterruptible Power Supplies						✓	✓
	5.11.11	- Telecommunications and I.T.						✓	✓
	5.11.12	- Nurse Call System						✓	✓
	5.11.13	- Fire Detection and Suppression System						✓	✓
	5.11.14	- Staff Attack / Induction Loop						✓	✓
	5.11.15	- Security system						✓	<b>✓</b>
	5.11.16	- Access Control system						✓	<b>✓</b>
	5.11.17	- CCTV system						✓	<b>✓</b>
	5.11.18	- Public address system						✓	<b>✓</b>
	5.11.19	- Digital TV and Radio Installation						✓	<b>✓</b>
	5.11.20	- Patient / Equipment Tagging						✓	<b>✓</b>
	5.11.21	- Induction Loop						✓	1
	5.11.22	- Bedhead Services						✓	<b>✓</b>
	5.11.23	- Electrical Commissioning Strategy						✓	<b>✓</b>
	5.12	1:50 mechanical and electrical services sections to illustrate use of ceilings, natural daylight, ventilation strategies, cooling and heating strategies, lighting strategy, acoustic strategy, specialist installations strategy, services concept						<b>√</b>	~
	6	Lift Provisions							
	6.1	Lift and Escalator Drawings Schedule						✓	<b>✓</b>
	6.2	Outline Building services (lift and escalator provision) Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification. Traffic flow analysis to be included.						<b>√</b>	<b>~</b>
	7	Environmental Services and Energy Management Strategy							
	7.1	Natural Ventilation drawings and proposals						✓	<b>√</b>
	8	Fire Strategy							
	8.1	1:100 Fire Strategy drawings in support of fire engineering proposals and how the proposals support the design concept and meet the requirements of the relevant code						<b>√</b>	<b>✓</b>
	8.2	Outline Fire Strategy Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	~
	9	Security Strategy							
	9.1	1:100 Security drawings in support of security strategy and how the security proposals support the design concept						✓	<b>✓</b>

Section	Sub-section	Design Deliverable	Meeting 1	Meeting 2	Meeting 3	Meeting 4	Meeting 5	Draft Final Tender	Final Tender
	9.2	Outline Security Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						<b>√</b>	<b>✓</b>
	10	Acoustic Strategy							
	10.1	Outline Acoustic Specification supporting the design concept including proposed materials and components to be used. Outline Specification shall be included for all components in accordance with the NBS Specification						✓	<b>✓</b>
	11	Adaptability, Flexibility and Expandability Strategy							
	11.1	Architectural adaptability drawings in support of the overall adaptability strategy						✓	✓
	11.2	Strategy and drawings showing how the design of the new RHSC and DCN demonstrates innovation, flexibility, consideration of whole life design and is capable of absorbing reasonable change in the future without excessive public, patient or clinical disruption						✓	<b>✓</b>
AP1.2		Specifications as described.						✓	<b>✓</b>
		<u> </u>				<u> </u>			l

## Appendix B (i) – Financial Agenda Topics and Submission Requirements

## 1. Dialogue Meeting 1: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 1	<ul> <li>Funding strategy</li> <li>Approach to surpluses/buffers</li> <li>Risk capital</li> </ul>	<ul> <li>A Submission covering the following topics:         <ul> <li>intended funding strategy, addressing 11 and 12 in Financial Submission requirements below.</li> <li>intended approach to surpluses/buffers, addressing 7 below;</li> <li>approach to risk capital addressing 15 below.</li> </ul> </li> </ul>
Financial Meeting 1	<ul> <li>Funding strategy</li> <li>Approach to surpluses/buffers</li> <li>Risk capital</li> </ul>	Presentation of Submission described above.

## 2. Dialogue Meeting 2: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 2	<ul> <li>Hedging</li> <li>Payment Mechanism</li> <li>Funder commitment and diligence</li> <li>Meeting updates</li> </ul>	<ul> <li>A Submission covering the following topics:</li> <li>approach to hedging (18 below).</li> <li>Bidder initial views of payment mechanism, addressing 21 below;</li> <li>Level of funder commitment obtained to date, progress on due diligence and approach between now and close to these issues, addressing 17, 19 and 20 below;</li> <li>Update on progress on areas discussed in Meeting 1, where relevant.</li> </ul>
Financial Meeting 2	<ul> <li>Hedging</li> <li>Payment mechanism</li> <li>Funder commitment and diligence</li> <li>Meeting 1 updates</li> </ul>	Presentation of Submission described above

## 3. Dialogue Meeting 3: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable	
Preparation Financial Meeting 3	<ul><li>Financial Model</li><li>Tax and accounting</li><li>Bid validity</li></ul>	<ul> <li>A Submission covering the following topics:</li> <li>The Financial Model, its structure and operation;</li> <li>Key model inputs and assumptions;</li> <li>Key model outputs, including presentation of initial</li> </ul>	

	<ul><li>Databook</li><li>Sensitivities</li><li>Working capital</li></ul>	<ul> <li>Annual Service Payment to proposals and response to 1, 8 and 9 below:</li> <li>Update as required on other areas.</li> </ul>
Financial Meeting 3	<ul> <li>Outstanding issues</li> </ul>	Presentation of Submission described above.  Discussion of outstanding issues.

## 4. Dialogue Meeting 4: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial Meeting 4	All other areas of Financial Submission	A Submission covering all remaining areas of Financial Submission not covered in previous meetings, addressing 2, 3, 4, 5, 6, 9, 10, 14, 16 and 22 below.
Financial Meeting 4	<ul> <li>All other areas of Financial Submission</li> </ul>	Presentation of Submission described above.

## 5. Dialogue Meeting 5: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial	<ul> <li>Update on previous</li> <li>Submissions</li> </ul>	A written update of any changes to previous Submissions.
Meeting 5	<ul> <li>Identification of areas requiring Dialogue prior to Draft Final Tender</li> </ul>	A schedule of areas requiring further Dialogue before Draft Final Tenders are invited.
Financial Meeting 5	<ul> <li>Update on previous         Submissions</li> <li>Identification of areas requiring         Dialogue prior to         Draft Final Tender</li> </ul>	Presentation of Submission described above.

## 6. Dialogue Meeting 6: Agenda Topics and Submission Requirements

Meeting	Topics	Deliverable
Preparation for Financial	Update on previous     Submissions	A written update of any changes to previous Submissions.
Meeting 6	Identification of areas requiring Dialogue prior to	A schedule of areas requiring further Dialogue before Final Tender is invited. The Board will provide a schedule to Bidders setting out its view of these areas

	Final Tender	which Bidders should annotate, expand and amend as required.
Financial Meeting 6	<ul> <li>Update on previous         Submissions</li> <li>Identification of areas requiring         Dialogue prior to         Draft Final Tender</li> </ul>	Presentation of Submission described above.

In order to ensure comparability in Submissions received, Bidders are requested to provide the financial information outlined below and to cross reference this to their Submission documentation. If Bidders believe that certain information is not applicable this should be clearly indicated within their responses.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
Finar	ncial Model Response			
1	The Bidder is required to submit a Financial Model which complies with the format requirements set out in section 3.9.2.	Required as part of Submission for Dialogue Meeting 3.	Required. Bidders should populate a Financial Model using standard terms as provided by the Board.	Required. Bidders should populate a Financial Model using actual terms provided by chosen funding providers.
2	The Bidder should provide confirmation that they are prepared to underwrite the tax and accounting adopted within the Financial Model	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
3	<ul> <li>Bidders should identify assumptions in relation to taxation including the following:</li> <li>Bidders must specify the corporation tax rates assumed, including any marginal relief (if appropriate) and confirm that consideration has been given to changes to the standard rate of corporation tax included in the Finance Act 2011 and announcements in the 2012 Autumn Statement;</li> <li>Bidders should specify the assumptions made in respect of the commencement and cessation of trade for tax purposes, including any tax relief assumed for pre-trading interest costs.</li> <li>Bidders should specify the assumptions made in respect of deductibility or non-deductibility of revenue costs, including in respect of construction costs, transaction costs, such as bid costs, development costs, planning costs</li> </ul>	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<ul> <li>and legal fees;</li> <li>Bidders are required to specify the assumptions made in respect of the tax treatment of capital expenditure, (including in respect of lifecycle costs and any intangible fixed assets) including amounts of expenditure allocated to the different capital allowance pools, amounts assumed to be non-qualifying for capital allowances, the rate of writing down allowance claimed and details of any capital allowances disclaimed;</li> </ul>			
	<ul> <li>Bidders are required to categorise taxable profits by type, such as trading profits, interest, and other non-trading profits or losses. The categories of taxable income should be appropriately ring-fenced (e.g. when carrying forward losses);</li> <li>Bidders must specify any assumptions made in respect of the tax treatment of capitalised interest;</li> <li>The application of transfer pricing legislation in the UK can have implications for PPP/PFI projects, particularly around the tax treatment of subordinated debt and corporate debt interest charges. Bidders should consider the implications of this aspect of corporation tax on their proposals and confirm that any such implications have been considered.</li> <li>Bidders should consider the potential implications of the worldwide debt cap in respect of the deductibility of interest costs and confirm that any such implications have been taken</li> </ul>			
	<ul> <li>into account in pricing the project.</li> <li>Bidders should provide a statement setting out their assumptions in respect of the tax treatment of any other income or capital contributions received;</li> <li>Bidders should provide a statement setting out any tax assumptions made concerning timing of</li> </ul>			

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<ul> <li>payments of corporation tax.</li> <li>Bidders should state the tax treatment of any surpluses</li> <li>Bidders must make their own decisions as to whether or not to seek advanced tax clearance from HMRC for any aspect of the proposed treatment. If such clearance is sought, Bidders must attach the appropriate correspondence to their submission. If the Bidder is relying on an advanced clearance from HMRC, this will need to be provided before contract signature and Financial Close.</li> <li>Bidders should identify fall back positions if the proposed treatment fails together with any other possible tax treatments that may be applicable to the contract.</li> <li>Bidders are required to state any VAT assumptions made and the basis for these assumptions (including VAT implications in relation to land transactions where applicable).</li> <li>Bidders should consider the implications of SDLT on their proposals. Any SDLT costs should be included within the Financial Model along with an accompanying statement explaining how it is calculated.</li> </ul>			
4	Bidders should/must obtain and submit a formal letter from their tax advisers or suitably qualified professional confirming that in their opinion the proposed tax treatment (including corporation tax, VAT and SDLT) is valid and that any required accounting treatments underpinning the tax treatment would be within the appropriate accounting standards. This opinion should set out the basis for the treatments adopted, and identify any risks associated with it.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
5	<ul> <li>The Bidder should separately identify the funders' margin and MLA costs (or equivalent) in the Financial Model and any swap credit spreads or liquidity margins (or equivalent) they would expect to incur</li> <li>The Bidder should confirm those elements of the overall interest rate that are fixed and those that are variable up to financial close</li> <li>The Bidder should identify the protocol they will utilise in setting the underlying funding rate at financial close ensuring transparency and best value for The Board</li> <li>All financing fees, including arrangement, commitment, agency and any other relevant fees should be separately identified and reflected in the Financial Model</li> <li>Assumptions on deposit and overdraft rates should be explicitly stated.</li> </ul>	Required as part of Submission for Dialogue Meeting 4 omitting those elements that are not relevant due to the use of standard terms.	Required omitting those elements that are not relevant due to the use of standard terms.	Required.
6	Bidders should confirm that they will maintain underlying construction, operating, FM and Project Co costs for a period of three months from the target Financial Close date with no adjustment for inflation.  Bidders should confirm that only capital, lifecycle and facilities management costs will increase post-validity period and that they will use all reasonable endeavours to mitigate the impact of any cost increases post validity period.  Bidders should specify which cost index or indices they require costs to be inflated in the post validity period. Note should be taken of the indexation regime that will be applied to Scottish Government support in relation to the construction cost cap set out in section 3.8.1.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
7	Bidders should set out their approach to the treatment of surpluses and cash	Required as part of	Required in detailed	Required in detailed form.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	buffers, confirming that approach set out in 3.8.7 above has been applied.	Submission for Dialogue Meeting 1.	form.	
8	The proforma financial information requirements are included in Annex 1 to this Appendix.  The information is the minimum requirement. Where the Bidder needs to provide additional information in order to provide a higher level of understanding of the individual components of the submission such additional information should be provided  The information in the financial proformas should not be aggregated.	Required as part of Submission for Dialogue Meeting 3.	Required.	Required.
9	The Bidder is required to provide a databook and user guide supporting the Financial Model for the Financial Submission, as set out in Section 3.9.3.	Draft version required as part of Submission for Dialogue Meeting 3.	Required.	Required.
10	Bidders should provide details on the range of sensitivity tests that funders have requested. The Final Tender Submission will require Bidders to provide the results of funders' sensitivity tests. The Board may also request certain sensitivities to be carried out and included in Financial Submissions.	Required as part of Submission for Dialogue Meeting 4.	Required. The Board will inform Bidders of any sensitivities required no later than three weeks before the submission date.	Required. The Board will inform Bidders of any sensitivities required no later than three weeks before the submission date.
Infor	mation required to support the funding			
11	The Bidder should provide assessment of the current issues in the funding markets that could impact upon the availability or terms of the finance offered. The Bidder should also explain how any risks within its chosen funding strategy will be managed to ensure that there is no impact on the affordability, value for money or timescales for	Required as part of Submission for Dialogue Meeting 1.	Updated version required describing how these issues will be addressed between Preferred	Updated version required describing how these issues will be addressed between Preferred Bidder and Financial Close.

Ref	Required Response	Submissions	Draft Final Tender	Requirement at
		during Dialogue	Submission	Final Tender
	delivery of the Project. The Bidder's response should set out how value for money will be secured between funding options and/or funding providers, at each phase of the procurement. Bidders should confirm acceptance of the position that The Board reserves the right to instruct a funding competition at any point during the procurement.		Bidder and Financial Close.	
12	Bidders should provide a statement confirming that they have not entered/will not enter into any exclusivity arrangements with funders.	Required as part of Submission for Dialogue Meeting 1.	Required.	Required.
13	The Bidder must submit the following information for each class of debt finance:  Identity of the funders Type of facility offered Amounts to be provided by each funder Credit margins and similar charges Explanation of the types of reserve account(s) and/or facility(ies) proposed and associated terms Terms and conditions attaching to the debt including: Draw down schedule Repayment schedule and tenor and any average life covenants Security required including parent company guarantees, bonding, letters of credit, liquidated damages and liability caps. Interest rates and other fees Financial ratios and covenants (base case, distribution and default)explicitly stating the basis of the calculation Default clauses Conditions precedent. Extent to which the funds are committed Confirmation that the margins and	Not required.	Draft versions required, noting that the terms described should not be used in the Financial Model but provided for information only.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	charges detailed above are a full and complete list and no additional margins or charges not otherwise disclosed will apply.			
14	The Bidder should specify any working capital requirements and provide evidence as to how this is to be financed.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.
15	The Bidder must submit the following information for each type of risk capital to be raised:  Identity of the investors  Amounts to be subscribed by each investor and the timing thereof  Minimum return requirement for each class of risk capital and the basis of any IRR calculations  Terms and conditions of the subscription including return requirements (shareholder agreement or detailed term sheet)  Coupon rights attaching to the subscription  Mezzanine interest rates  Terms and any other agreements between the Investors in their capacity as investors in the Project Co  Any other rights attaching to this subscription  An undertaking that no additional margins or charges will apply that have not already been disclosed and included in the Financial Model  The length of time each class of risk capital will remain in the project vehicle  The extent to which the funds are committed.	Outline proposals required as part of Submission for Dialogue Meeting 1.	Required.	Required.
16	To the extent that other forms of	Required as	Required.	Required.
	finance other than those listed above are to be used, the Bidder must provide appropriate details equivalent to those requested for subordinated debt and	part of Submission for Dialogue Meeting 4.		

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	debt finance.			
17	The Bidder is required to produce the strongest form of commitment possible. The level of investor and Funder commitment should be demonstrated through the provision of:  • board minutes or draft letters of support from the sponsor shareholders committing to subscribe subordinated debt on the terms identified above  • letters of support from underwriting banks and financial institutions (if applicable) offering debt facilities on the terms identified above (to be accompanied by draft term sheets)  • A clear statement on the level of approval process and timescale that will be required from the respective lending organisations should be made.  • A letter from the Bidder's financial advisers stating that the proposed funding structure is realistic, achievable and deliverable and that the financing proposals are sufficient to enable the Project Co to meet its obligations under the NPD Project Agreement.	Required as part of Submission for Dialogue Meeting 2.	Required in final draft form.	Required in final form.
18	The Bidder must set out clearly its proposal in relation to any hedging arrangements required to support the project. The following details should be provided:  • the manner in which the Bidder will address the risk of future movements on interest rates, including a full description of its interest rate hedging to be applied  • the time period over which hedges are expected to be in place  • details of any financial instruments that will be used to provide protection against interest rate movements and the cost/effect of such protection should be reflected in the Financial	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
	<ul> <li>Model</li> <li>confirmation that the Project Co will bear all interest rate risk in respect of its borrowings once financial close is achieved</li> <li>confirmation that the Bidder will bear all foreign exchange risk</li> <li>the manner (if any) in which the Bidder will address the risk of future movements in the Retail Price Index (RPI). The Board does not expect that Bidder's funding solution will require the use of RPI hedging instruments. The interim Financial Model submission should clearly demonstrate the proportion of costs that are fixed, the proportion subject to inflation and the basis upon which the Bidder has set the proportion of Annual Service Payment that will be subject to inflation</li> <li>confirmation of the acceptance of the principle of benchmarking of hedging instruments (including GICs where appropriate) at financial close.</li> </ul>			
19	The Bidder should indicate the extent of the funder due diligence that has been carried out to date and that will be carried out prior to the appointment of a preferred bidder and the overall scope and timetable of funder due diligence up to financial close. In addition to the provider of senior debt, the response should cover due diligence required by any third party provider of subordinated debt funds.	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.
20	A programme setting out the timescale for agreeing all matters relating to funding to financial close must be provided. Evidence must be provided that the proposed providers of finance to Project Co have accepted this timetable in principle and that adequate resource will be available to ensure the timetable is met.	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.

Ref	Required Response	Submissions during Dialogue	Draft Final Tender Submission	Requirement at Final Tender
Othe	rinformation			
21	The Bidder should provide a commentary on the calibration of the Payment Mechanism and confirm its acceptance in principle of the calibration of, and tolerances built into, the Payment Mechanism and performance regime. In commenting on these, the Bidder is expected to address:  • Practicality; • Value for Money; and • Ability to obtain funding	Required as part of Submission for Dialogue Meeting 2.	Required.	Required.
22	Bidders must provide fully detailed calculations supporting the insurance premiums quoted, including sums insured, rates applied and deductibles, where applicable. This must be provided separately for construction and operational insurances.	Required as part of Submission for Dialogue Meeting 4.	Required.	Required.

# Annex 1 to Appendix B– Financial Proformas

## Appendix C - Legal Agenda Topics, Submission Requirements and Evaluation

### Appendix C (i) – Legal Agenda Topics

#### 1. Overview

It is the Board's intention that the core elements for discussion at the relevant Dialogue Meetings shall be as set out in the following legal agendas. However, the Board shall reserve the right to dovetail the legal agendas to address specific Bidder issues during the Dialogue Period.

## 2. Legal Agenda Topics

Meeting	Topics	Deliverable
Dialogue Meeting 1	Top 10 Key Issues in NPD Project Agreement	<ol> <li>A list of up to 10 key commercial / contractual issues in relation to the NPD Project Agreement together with:         <ul> <li>an explanation of each of the Bidders' issues and why Bidders do not believe the NPD Project Agreement addresses the relevant issue; and</li> <li>where relevant, the Bidders' alternative proposal/s, explaining why the alternative proposal/s might be acceptable to the Board.</li> </ul> </li> <li>Any comments that Bidders may have in relation to the NPD Model requirements of the Board, including the NPD Articles of Association.</li> </ol>
Dialogue Meeting 2	Project Agreement mark-up and contractual structure	1. Bidders are required to submit a detailed mark-up (in both clean and PDF comparison format) of the NPD Project Agreement (including all Schedules), together with a commentary in the form set out in Appendix C(ii) of Volume 1 of the ITPD. The detailed mark-up of the NPD Project Agreement and commentary should include:  • an explanation of each of the Bidder's amendments s and why the Bidder does not believe the NPD Project Agreement addresses the relevant issue; and  • where relevant, the Bidder's alternative proposal/s,
		<ul> <li>explaining why the alternative proposal/s might be acceptable to the Board,</li> <li>Details of any proposed caps and termination triggers,</li> <li>with such documentation being referred to as the "NPD Project Agreement Submission".</li> <li>2. In addition, the following documentation shall also require</li> </ul>

Meeting	Topics	Deliverable
		to be provided by Bidders:
		Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and guarantees. Bidders should also be prepared to provide a presentation on its contractual structure;
		Draft heads of terms for each of the Contractor, Services Provider and any relevant Key Sub- contractors. The Board will expect to see details such as caps in liability, liquidated damages and indemnities covered in these heads of terms;
		Key terms of any proposed parent company guarantee;
		Collateral Warranties to be provided to the Board together with key commercial terms;
		Step-in and direct agreements together with key commercial terms;
		<ul> <li>Any proposed amendments to the Articles of Association,</li> </ul>
		with such documentation being referred to as the "Additional Documentation Submission".
		3. Bidders should bear in mind the Board's expectations of minimal derogations to the NPD Project Agreement and be mindful of the Board's requirement to obtain SFT approval of any derogations pursuant to paragraph 3.5 (Derogation Procedure) of Volume 1 of the ITPD).
Dialogue Meeting 3	Project Agreement mark-up and contractual structure	Continue dialogue in relation to Bidders' NPD Project     Agreement Submission.
		Continue dialogue in relation to Bidders' Additional     Documentation Submission.
		3. Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission and Additional Document Submission.
Dialogue Meeting 4	Project Agreement mark-up and contractual structure	Continue dialogue in relation to Bidders' NPD Project     Agreement Submission.
		Continue dialogue in relation to Bidders' Additional

Meeting	Topics	Deliverable
		Documentation Submission.  3. Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission and Additional Document Submission.
Dialogue Meeting 5	Project Agreement mark-up and contractual structure	<ol> <li>Continue dialogue in relation to Bidders' NPD Project Agreement Submission.</li> <li>Continue dialogue in relation to Bidders' Additional Documentation Submission.</li> <li>Board to provide feedback to Bidders in relation to the Bidders' Project Agreement Submission, Additional Document Submission.</li> </ol>
Dialogue Meeting 6	Review of Draft Final Tenders	Please refer to paragraph 3 (Draft Final Tender Requirements) below.

#### Appendix C (ii) – Submission Requirements and Evaluation

### 1. Draft Final Tender Requirements for Legal Submission

Prior to Dialogue Meeting 6, Bidders are required to re-submit the documentation set out in paragraph 1.1 below to reflect the progress of issues agreed during the Dialogue Period. This documentation shall in turn form a Bidder's legal submission for the Draft Final Tender.

#### 1.1 NPD Project Agreement and Additional Documentation

Bidders shall be required to provide:

1.1.1 A fully marked-up NPD Project Agreement in both clean and PDF comparison format together with a detailed commentary in the form set out in Appendix C(ii) of Volume 1 of the ITPD in relation to each amendment, setting out a Bidder's commercial position where relevant. The mark up should include details of any proposed caps (with associated justifications for the levels set), and details of all termination trigger levels and persistent breach levels (including associated justifications for any departures from those set out in the NPD Project Agreement), where they appear in square brackets in the NPD Project Agreement. Bidders will not be permitted to include in their mark up of the NPD Project Agreement; and

#### 1.1.2

- (a) Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and any applicable guarantees which will be granted to the Board and the circumstances in which the protection offered by the collateral warranties and direct agreements will be available; and
- (b) Fully developed, signed heads of terms for each of the Contractor, Services Provider and any relevant Key-Subcontractors. The Board will expect to see details such as caps on liability, liquidated damages and indemnities covered in these heads of terms;
- (c) Final version of proposed parent company guarantees;
- (d) Final version of the Articles of Association.

### 1.2 Prohibited Bidder Amendments

- 1.2.1 Bidders will not be permitted to include in their mark up of the NPD Project Agreement referred to in paragraph 1.1.1 above or the additional documentation referred to in paragraph 1.1.2 above:
  - (a) amendments, caveats and/or qualifications which have not previously been raised with the Board and/or its advisers during the Dialogue Period (other than drafting that is necessarily consequential on, or necessary to implement, amendments which have been so raised); or
  - (b) amendments, caveats and/or qualifications which have been raised with the Board during Dialogue Period but rejected by the SFT,

such amendments being defined as "Prohibited Bidder Amendments".

1.2.2 The Board shall be entitled to reject in its absolute discretion any Prohibited Bidder Amendments included within the documentation to be submitted pursuant to paragraphs 1.1.1 and 1.1.2 above which forms part of a Bidder's legal submission for the Draft Final Tender.

#### 1.3 Review of Draft Final Tenders

As per paragraph 4.6 (Draft Final Tender) of Volume 1 of the ITPD, the Board will review the Draft Final Tenders to ensure compliance with the tender requirements. A final round of Dialogue will then take place as indicated on the programme at paragraph 4.2.1 (Timetable of Dialogue Meetings) of Volume 1 of the ITPD. This Dialogue will provide feedback to Bidders on the content of their Draft Final Tender and clarify any outstanding points.

#### 2. Final Tender

#### 2.1 Overview

As per paragraph 4.8 (Final Tender) of Volume 1 of the ITPD, the Board shall provide Bidders with an Invitation to Submit Final Tenders. Unless the Bidder is notified otherwise in the Invitation to Submit Final Tender, the legal submission requirements for the Final Tender shall be as set out in paragraph 4.2 (NPD Project Agreement) and 4.3 (Additional Documentation) below.

### 2.2 NPD Project Agreement

- 2.2.1 Bidders should note that a NPD Project Agreement specific to each Bidder (Final Tender (Bidder Specific) NPD Project Agreement) shall be issued to each Bidder by the Board in the Invitation to Submit a Final Tender.
- 2.2.2 The Final Tender (Bidder Specific) NPD Project shall be based upon:
  - (a) the respective NPD Project Agreement submitted by Bidders as part of the Draft Final Tender; and
  - (b) any agreed issues resolved in the final Dialogue Meeting,

and Bidders shall be required to submit their Final Tenders on the basis of the terms of the Final Tender (Bidder Specific) NPD Project Agreements, without further amendment.

2.2.3 Any amendment to the Final Tender (Bidder Specific) NPD Project Agreement may result in a Bidder's entire Final Tender being rejected by the Board without further evaluation.

#### 2.3 Additional Documentation

2.3.1 Subject to paragraph 2.3.2, the following documentation shall also require to be submitted by Bidders as part of their Final Tender:

- (a) Contractual matrix/diagram, showing clearly the relationships between the Bidder and its supply chain including funders and sub-contractors. The diagram should provide details of all collateral warranties, direct agreements and any applicable guarantees which will be granted to the Board and the circumstances in which the protection offered by the collateral warranties and direct agreements will be available;
- (b) Fully developed, signed heads of terms for each of the Contractor, Services Provider and any relevant Key Sub-contractors. The Board will expect to see details such as caps on liability, liquidated damages and indemnities covered in these heads of terms;
- (c) Final version of proposed parent company guarantees; and
- (d) Final version of the NPD Articles of Association.
- 2.3.2 The documentation referred to above in paragraph 2.3.1 above, shall be based upon:
  - (a) the documentation referred to in paragraph 1.1.2 which was submitted by respective Bidders as part of their legal submission for the Draft Final Tender; and
  - (b) any agreed issues resolved in the final Dialogue Meeting,
  - and Bidders shall be required to submit their Final Tenders on the basis of the terms of this paragraph, without further amendment.
- 2.3.3 Any amendment to the documentation referred to in paragraph 2.3.1 may result in a Bidder's entire Final Tender being rejected by the Board without further evaluation.

#### 2.4 Evaluation of Final Tender

- 2.4.1 The legal submission which forms part of the Final Tender shall be evaluated as follows:
  - (a) NPD Project Agreement

Subject to paragraph 2.2.3, the NPD Project Agreement shall be evaluated in accordance with the following:

- (i) Pass/Fail: Bidders shall be awarded a pass if they accept the Final Tender (Bidder Specific) Project Agreement. Bidders shall be awarded a fail if they do not accept the Final Tender (Bidder Specific) Project Agreement;
- (ii) If a pass is received by Bidders in respect of the Final Tender (Bidder Specific) Project Agreement, the provisions of paragraph 5.7.1(d) (Quantifiable Bidder Amendments) of Volume 1 of the ITPD shall be applied. The Quantifiable Bidder Amendments that shall be applied to a Bidder's Provisional Economic Cost Score shall be those Quantifiable Bidder Amendments notified by the Board to Bidders during the Dialogue Period.
- (b) Additional Documentation

Subject to paragraph 2.3.3, the additional documentation referred to in paragraph 2.3.1 above shall be evaluated in accordance with the following:

- (i) Pass: Bidders shall be awarded a pass if they submit as part of their legal submission for their Final Tender the documentation referred to above in paragraph 2.3.1 above, which shall be based upon:
  - (A) the documentation referred to in paragraph 1.2.1 which was submitted by respective Bidders as part of their legal submission for the Draft Final Tender; and
  - (B) any agreed issues resolved in the final Dialogue Meeting,
- (ii) Fail: Bidders shall be awarded a fail if they submit as part of their legal submission for their Final Tender the documentation referred to above in paragraph 2.3.1 above which is not based upon:
  - (A) the documentation referred to in paragraph 1.2.1 which was submitted by respective Bidders as part of their legal submission for the Draft Final Tender; and
  - (B) any agreed issues resolved in the final Dialogue Meeting.

## Appendix C (iii) - Proforma Commentary Table for NPD Project Agreement

The following pro forma commentary table should be used by Bidder's as the basis of their commentary table to accompany any mark-up of the NPD Project Agreement.

In accordance with paragraph 5.7 (Price Evaluation), the "Issue" column of the commentary table should include a description of each amendment to the NPD Project Agreement as either 1 or 2 as follows:

- 1. Minor/inconsequential amendment;
- 2. Quantifiable Bidder Amendment.

Issue	Clause	Description	Issue	Bidder Comment	Board Comment
1.	4	Project Documents	1	[•]	[•]

### Appendix C (iv) – Interface Proposals

### Summary of Interface Proposals to be provided by Bidders

The following Interface Proposals are required to be provided by Bidders to the Board during the Dialogue Period. The requirements of the Interface Proposals are more fully set out in Appendix A of the Board's Construction Requirements, subject to certain conditions within Schedule Part 5 (Land Matters), and this summary should be read in conjunction with these provisions. Although the Interface Proposals are primarily relevant to the Construction Phase, some Interface Proposals shall apply to the Project Operations. Please note that Appendix A of the Board's Construction Requirements may be subject to change to reflect discussions during the Dialogue Period.

The requirement for the Interface Proposals arose from an agreement between the Board and Consort when the Site was removed from the Campus Site (i.e. in order for the Board to secure land for the construction of the Facilities) and therefore from Consort's responsibility. The Interface Proposals are intended to provide Consort with some comfort that the Project Operations are conducted by Project Co in a manner which is least detrimental to Consort's ability to operate the Retained Estate and/or Retained Site.

The Interface Proposals shall be agreed between the Board and Consort pursuant to procedures set out in the RIE Project Agreement. All Bidders are required to submit Interface Proposals prior to relevant Dialogue Meetings, as per the timetable set out below. However, the Board shall not engage with Consort to finalise and agree these Interface Proposals until Preferred Bidder stage. It is the Board's intention that the Interface Proposals shall be in an agreed form and ready for implementation by the Preferred Bidder at Financial Close.

The Board's approach to the Interface Proposals in the ITPD is to ensure a level playing field between Bidders. Please note that the Board cannot guarantee that Appendix A of the Board's Construction Requirements, upon which the Interface Proposals shall be based, will not be subject to further amendment or refinement at Preferred Bidder stage or post-financial close. However, at this stage, the Board anticipates that any such amendment or refinement should not be material.

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
1	Traffic Management Strategy	<ul> <li>The Traffic Management Strategy ('TMS') is required where Project Co wants to access the Site for the construction of the Project via the Orange Areas (which includes the orange hatched areas) shown on Plan 2.</li> <li>The TMS is a proposal which is to address traffic management at the Campus which must be prepared having regard to: <ul> <li>(a) the health and safety of all users of the Campus Site and/or Campus Facilities must be safeguarded at all times;</li> <li>(b) RIE Facilities is a working hospital to which access (including both pedestrian and vehicular) must be maintained at all times;</li> <li>(c) traffic at the Campus Site is to be prioritised in accordance with the following hierarchy: <ul> <li>(i) blue light traffic access/egress;</li> <li>(ii) staff, patients and visitors to the Campus Site and/or Campus Facilities (public transport);</li> </ul> </li> </ul></li></ul>	Final Tender.	Preferred Bidder Stage	Pass / Fail	Construction Phase

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		<ul> <li>(iii) staff, patients and visitors to Campus Site and/or Campus Facilities (car parking);</li> <li>(iv) Campus Site and/or Campus Facilities deliveries, FM supplies and waste collection; and</li> <li>(v) Project Co's construction traffic; and</li> <li>(d) insofar as reasonably practicable and appropriate in the circumstances (taking into consideration, for example, the number of construction vehicles involved, the number of journeys anticipated, the time of the day when access is required and the part(s) of the areas affected) construction traffic using the affected area shall require to be segregated from other traffic and/or pedestrians using the affected area (for example, through contra-flow or one way traffic arrangements and safe routes for pedestrians).</li> <li>Further details of the TMS are set out in paragraph 2 (Construction Access over Orange Area) of Section 1 of</li> </ul>				
		Part 1 of Appendix A of the Board's Construction Requirements.				
2	Oversail Strategy	If as part of its activities (including construction of the Project) Project Co needs to oversail any other part of the		Preferred Bidder	Pass / Fail	Primarily Construction

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		Retained Site and/or Retained Estate then Project Co requires to prepare Oversail Strategy/ies. The Oversail Strategy/ies must comply with specified criteria and include:  (a) programme of proposed oversail activities;  (b) risk assessments;  (c) a strategy for erection, operation, dismantling of oversailing crane(s), the details of which are more fully set out in Section 4 (Oversailing) of Part 1 of Appendix A of the Board's Construction Requirements.	Also required to be submitted for Draft Final Tender and	Stage		Phase but also Operational Term if any Project Operations required oversailling
3	Access Strategy	An Access Strategy is required where Project Co needs to occupy part or parts or do works in and/or hoard off Access Areas (which includes Orange Areas (including orange hatched areas, on Plan 2), Yellow Area (including yellow hatched area, on Plan 2) and Substation Access Area (which is shaded blue and hatched black on Plan 2) for carrying out works to pedestrian and vehicular access, to reconfigure roads, footpaths and landscaped areas and install surface water and foul/sewer drainage connections.  Pedestrian and vehicular access to the Campus Site and/or Campus Facilities must be maintained at all times (albeit that the access arrangements may require to be	for Dialogue Meeting 2.  Also required to be submitted for Draft Final Tender and	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term (wherever there is to be future ongoing maintenance the areas described).

Item	Description of Interface Proposal		Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		occupation.) of an Acces managing pe similar to the	strictions or diversions during any periods of These restrictions need approval in the form as Strategy. The Access Strategy is for destrian and vehicular access, in a manner a TMS above but is not limited to traffic for The Access Strategy is be prepared which	Tender.			
		(a)	The health and safety of all users of the Campus Site and/or Campus Facilities must be safeguarded at all times;				
		(b)	Regard is had to RIE Facilities as a working hospital to which appropriate pedestrian and vehicular access must be maintained at all times;				
		(c)	Pedestrian and vehicular access must be maintained (albeit, at times it may be restricted) over the section of Little France Crescent lying within the part of the Orange Area shown shaded orange (but not hatched black) on Plan 2; and				
		(d)	Traffic will be prioritised in accordance with the following hierarchy:  (i) blue light traffic access/egress;				

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		(ii) staff, patients and visitors to the Campus Site and/or Campus Facilities (public transport);				
		(iii) staff, patients and visitors to the Campus Site and/or Campus Facilities (car parking);				
		(iv) Campus Site and/or Campus Facilities deliveries, FM supplies and waste collection; and				
		(v) Project Co's construction traffic.				
		Further details of the Access Strategy are set out in paragraphs 2 to 4 (Access Strategy) and 8 of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements				
		Provisions about any Access Strategy to address an access which is required in the Operational Term not contemplated by the Access Strategy above is dealt with in Section 2 (Access Strategy and Amended Drainage Proposal) of Part 2 of Appendix A of the Board's Construction Requirements.				
4	Supplementa I Drainage	A Supplemental Drainage Proposal is required where Project Co wants to install new surface water drainage		Preferred Bidder	Pass / Fail	Construction Phase

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
	Proposal	connections from the Site to the existing surface water drain within the Orange Area. There is already an Initial Drainage Proposal, as set out in Appendix E of the Board's Construction Requirements, which primarily details the agreed connection points. This has to be complied with and supplemented by this Supplemental Drainage Proposal to include details of the design, construction, programme and Project Co's drainage proposals for the relevant drainage works.  Prior to any drainage works taking place, Project Co (once appointed as Preferred Bidder) shall undertake a camera survey to document the condition of the existing surface water drainage system within the RIE Site. The camera survey will be carried out in accordance with Good Industry Practice and cover the full section of the RIE Site surface water drainage system that will serve the Site, from the point of the first connection from the Site to the drainage system to the point at which the drainage system discharges from the RIE Site to the Niddrie Burn. Four hard copies and an electronic version of the camera survey will be delivered by Project Co to the Board and no works may be carried out until the said camera survey has been carried out and requisite copies delivered by Project Co to the Board.  Further details of the Drainage Proposals are set out in paragraphs 5 (Drainage Proposals) and 8 (Other General	Dialogue	Stage		

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		Matters) of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements.				
		Amended Drainage Proposal				
		If when Project Co is carrying out any of the drainage or services connections as more fully described above, it transpires that the position within the Orange Area is different (including route, depth, size or condition of the service media within the Orange Area) from what was anticipated so there is a need to change the scope of the drainage or service connections, then Project Co requires to prepare an Amended Drainage Proposal to include additional detail, information and drawings as are available.				
		Further details of the Amended Drainage Proposals are set out in paragraph 2 (Drainage Proposals) of Section 2 of Part 2 of Appendix A of the Board's Construction Requirements.				
5	Substation Proposal	The Sub-station Proposal must address the construction and maintenance repair and renewal of the access road in the Substation Access Area in the event that a Substation is being built on the Substation Site.	Draft to be submitted for Dialogue Meeting 2.	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term.
		Substation Access Area				

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		If Project Co needs to do works to construct an access road in Substation Access Area shown shaded blue and hatched black on Plan 2, then prior to any access Project Co will have to prepare a Substation Proposal which must include details of design, construction, programme and Project Co's Proposals for the relevant Sub-station Access Works.  The Substation Proposal must:  (a) be safe in respect of personnel or equipment on any part of the Campus and/or Campus Facilities;  (b) be in accordance with Good Industry Practice and Law;  (c) not materially adversely effect the flow or functioning of the Niddrie Burn; and  (d) adequately protect the high voltage electricity cable running through the Substation Access Area.  Substation  Project Co also needs to provide information about the design and construction of the Substation and Substation HV Cable.	required to be submitted for Draft			

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		Method Statement  Maintenance of Substation HV Cable by Project Co.  Further details of the Substation Proposals and the Substation and Substation HV Cable are set out in paragraphs 6 and 7 (Substation Access and Cables) of Section 5 of Part 1 of Appendix A of the Board's Construction Requirements.				
6	Service Proposal (Service Strip and Foul Service Strip)	If Project Co wishes to do works (in each case as necessary in connection with the Works) to construct and lay:  (a) service media through under over Service Strip (shown shaded yellow and hatched black on Plan 2) for the passage of water, sewage, drainage or oil, gas, electricity, telephone (and other telecommunications); and/or  (b) foul drainage through under over Foul Service Strip (shown shaded yellow and hatched black on Plan 2A) for the passage of foul drainage,  then Project Co requires to exhibit Scottish Water or other statutory authority/utility company approvals in relation to the works for the connection of service media from the Site to the mains sewer located on the RIE Site and provide a Project Co's Proposal which must detail the route and	Draft to be submitted for Dialogue Meeting 2.  Also required to be submitted for Draft Final Tender and Final Tender.	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		depth of service media and detailed Method Statements for the maintenance, repair and renewal of the (i) service media through, under and over the Service Strip; and (ii) foul drainage through the Foul Service Strip.  Further details of the Service Proposal are set out in Section 6 (Service Strip and Foul Service Strip) of Part 1 of Appendix A of the Reard's Construction Requirements				
		of Appendix A of the Board's Construction Requirements.  Amended Service Proposal  If when Project Co is carrying out any of the drainage or services connections as more fully described above, it transpires that the position on Site is different (including route, depth, size or condition of the service media on Site) from what was anticipated so there is a need to change the scope of the drainage or service connections, then Project Co requires to prepare an Amended Service Proposal to include additional detail, information and drawings as are available.				
		Further details of the Amended Service Proposal are set out in Section 3 (Service Strip and Foul Service Strip) of Part 2 of Appendix A of the Board's Construction Requirements.				

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
7	Connection Proposal	Project Co shall prepare a Connection Proposal in respect of the RIE Works. This should include a programme and the following specific connection information:  (a) Link Building: (i) Design package for method of connection of the Facilities to the Link; and (ii) a Project Co's Proposal in respect of the connection to the Link Building;  (b) Fire alarm systems: (i) The fire alarm system specification for the interface link between the fire alarm system within the Facilities and the RIE Facilities; (ii) design package information for method of installation for the interface link between the fire alarm system within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the interface link between the RIE Facilities; and (iv) a Method Statement for the maintenance and repair of the interface link between the fire alarm system within the Facilities and the RIE Facilities;  (c) Security systems: (i) The security system specification for the interface link between the security system within the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the interface link between the security systems between the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the interface link between the security	submitted for Dialogue Meeting 2.  Also required to be submitted for Draft Final	Preferred Bidder Stage	Pass / Fail	Construction Phase and Operational Term

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		systems within the Facilities and the RIE Facilities; and (iv) a Method Statement for the maintenance and repair of the interface link between the fire alarm systems within the Facilities and the RIE Facilities;  (c) PTS: (i) The PTS specifications for the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the PTS within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the installation of the PTS within the Facilities and RIE Facilities; (iv) a Method Statement for the maintenance and repair of the PTS within the Facilities and RIE Facilities; The Board will confirm the route during Dialogue.  (d) ICT: (i) The ICT specifications for the Facilities and the RIE Facilities; (ii) design package information for the proposed method of installation of the ICT within the Facilities and the RIE Facilities; (iii) a Project Co's Proposal for the installation of the ICT within the Facilities and RIE Facilities; (iv) a Method Statement for the maintenance and repair of the ICT within the Facilities and RIE Facilities; The Board will confirm the route during Dialogue.  Project Co should refer to Sub-section C of the Board's Construction Requirements as regards specifications and control requirements for such PTS, ICT, fire and security systems and information about the Link Building.				

Item	Description of Interface Proposal	Content	When Submitted by Bidder	When agreed between Board and Bidder	How evaluated for Final Tender	Applicable to Construction Phase, Operational Term or both
		Further details of the Connection Proposal are set out in Section 7 (Link Building) of Part 1 of Appendix A of the Board's Construction Requirements.				

## Appendix D – Dialogue Period Query proforma

## Re-provision of RHSC + DCN DIALOGUE PERIOD QUERY PROFORMA

Ref No:						
Dated Raise	ed:					
Topic:	:: Technical Admin			nistration		
	Financial Commerc	ial	Other			
Is this quer	y considered	commercia	al in confidenc	e?	Yes	No
Query/Requ	uest:					
Response:						
Date of Res	ponse:					
Please deli	ver response	via:	Le	tter	Fax I	E mail
Raised on I	pehalf of [	]	by: [	]		
For RHSC I	OCN Use					
RHSC DCN Ref No: Date Received:						
Passed to	NHSL Project Team		E&Y		Scottish Governmer other	nt
			MacRoberts Mott Mac			
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## Appendix E – Reference Design Elements

Elements of the Reference Design	Status
Schedules of Accommodation	For spaces relating to Operational Functionality that will be used by NHS Lothian, and Non-Clinical Services spaces, the area of these rooms shall be a minimum and this minimum area is a mandatory requirement. The Reference Design Schedule of Accommodation needs to be read in conjunction with the Draft Schedule of Accommodation prepared by the Board as noted in paragraph 2.5.1 (Schedule of Accommodation and Reference Design Schedule of Accommodation). All other spaces are indicative.
Development Control Plan and Urban Design 1:1000/1:500	Mandatory - those elements defined under Operational Functionality i.e.:  (i) the points of access to and within the Site and the Facilities;  (ii) the relationship between one or more buildings that comprise the Facilities;  (iii) the adjacencies between different departments within the Facilities; and  (iv) the corridor widths as shown are a minimum with these minimum widths being mandatory requirements.  Indicative - everything else including Non-Clinical Services spaces.
Departmental Layouts 1:500	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; (iii) the adjacencies between different departments within the Facilities; and (iv) the corridor widths as shown are a minimum with these minimum widths being mandatory requirements.  Indicative - all other elements (e.g. Non-Clinical Services spaces, layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces etc).
General Arrangements Plans 1:200	Mandatory - those elements defined under Operational Functionality i.e.: (i) the points of access to and within the Site and the Facilities; (ii) the relationship between one or more buildings that comprise the Facilities; (iii) the adjacencies between different departments within the Facilities;

Elements of the Reference Design	Status
	(iv) the adjacencies between rooms within the Hospital departments; and(v) the corridor widths as shown are a minimum and these minimum widths are mandatory requirements.
	Indicative - all other elements (e.g. Non-Clinical Services spaces, layouts and locations for Hard FM spaces, locations and sizes for services risers and spaces, etc).
General Arrangement Elevations and Sections.	Indicative
Generic Room Layouts 1:50	Mandatory - those elements defined under Operational Functionality i.e.: The location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans and internal room elevations.
	Indicative - All other elements.
Key Room Layouts 1:50	Mandatory - those elements defined under 'Operational Functionality' i.e.: The location and relationship of equipment, furniture, fittings and user terminals as shown on the 1:50 loaded room plans and internal room elevations.
	Indicative - All other elements.
Fire Strategy 1:200	Indicative
Interior Design and Artwork Concepts	Indicative
Wayfinding Strategy	Indicative

Elements of the Reference Design	Status
Flexibility and expandability	Indicative
Supplies, Storage, Distribution and Waste Management (Soft FM)	Mandatory
Decontamination and Control of Infection (HAI- SCRIBE)	Indicative
BREEAM	Indicative
Geotechnical Site Investigation	N/A (Data Room status)
Decanting, Phasing,	Indicative
Traffic Impact Assessment and Traffic Management Plan	Indicative
Security Strategy	Indicative
ICT strategy	Indicative
Helipad	Indicative

## **Appendix F – Thermal and Energy Model Parameters**

## 1. Thermal Modelling Data

### 1.1 General

Project Co shall undertake Dynamic Thermal Energy Modelling to assess the energy performance and thermal performance of Project Co's Proposals.

The thermal performance of the Facilities shall be dynamically thermally modelled to the Project specific parameters, identified within Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*). Thermal modelling shall inform the sizing of all heating, ventilation and comfort cooling requirements for Project Co's Proposals, inclusive of all natural ventilation pathway and overheating analysis.

In conjunction with energy performance, CO<sup>2</sup> emissions shall also be required to be equal to, or better than, the agreed Carbon Emissions requirements in Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters).

The following documentation shall be used in providing the targeted thermal energy modelling requirements for the building;

- Scottish Health Technical Memorandums
- EnCO2de
- Health Building Notes
- CIBSE Design Guides
- Building Regulations (Scotland) Technical Standards

## 1.2 Building Envelope

The building envelope, construction and materials and the operation will have a significant impact on the efficient operation of the building engineering services installations. The thermal and energy model requires therefore to take cognisance of the project specific factors as detailed in the Reference Design proposals and Section 3 (*Board's Construction Requirements*) of Schedule Part 6 (*Construction Matters*).

The modelling exercise must take cognisance of the RIE Facilities and the associated Link Building to recognise the interface between the new and the existing buildings.

The Gross Internal Floor Area should be calculated by measuring the overall internal area of the building making a reduction for partitions, walls, voids and courtyards. The floor areas of internal rooms, circulation spaces and internal walkways should be included.

The heated volume should take into account the height between the floor surface and the room ceiling and should exclude ceiling voids, pipe ducts and plant rooms and include for a 6% reduction due to walls/partition generally in accordance with HTM 07-02: EnCO2de – Making energy work in healthcare.

The building envelope performance design criteria should be based upon an air tightness figure measured in m³/hr/m² @ 50Pa as appropriate to the type of facility and in accordance with Building Regulations (Scotland) Technical Standards.

Further methods of measuring and demonstrating the thermal efficiency of the building envelope such as thermal imaging can be utilised subject to agreement with the Board.

## 1.3 Ambient Weather Profile and Degree Day

The energy use of the building will be predicated by reference to the outside temperature and the Department of Health Estate and Facilities division publishes degree day data on a monthly basis.

The energy modelling shall be based on the above degree day data utilising the base temperature of 18.5° Celsius and Edinburgh degree day weather profile data.

## 1.4 Dynamic Thermal and Energy Modelling Simulation

A certified and industry approved Dynamic Simulation Model (DSM) software tool compliant with CIBSE Applications Manual AM11 shall be used to produce the thermal and energy model for the Facilities.

Bidders shall seek agreement from the Board of their proposed modelling tool which shall require to be the most updated version of either:-

- IES (Integrated Environmental Solutions) Programme
- TAS (Thermal Assessment Simulation) Programme

Future modelling tools may be available and Bidders shall obtain the agreement of the Board if they propose to use a certified alternative to those listed above.

### 1.5 Plant and Systems

The thermal and energy modelling shall incorporate all building services installations as required to maintain the Facilities within the operational parameters as defined in Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters).

Any specific loads that Bidders deem to be excluded from the thermal and energy model, such as catering, etc., shall be quantified by Bidders and submitted to the Board for agreement and acceptance prior to any modelling works commencing.

## 1.6 Group 2 to 3 Equipment

As part of the thermal and energy modelling exercise Bidders shall provide an assessment of the energy consumption of the known Group 2A, Group 2B and Group 3 equipment.

Bidders are to provide a proposed methodology to the Board to demonstrate the projected energy consumption of the Group 2A, Group 2B and Group 3 equipment.

Although this information shall not form part of the agreed energy or carbon emissions targets, it shall be utilised to provide the Board with an informed estimate of anticipated future energy consumptions and utilities costs to allow future budget allocations to be assessed.

## 2 Design Period

## 2.1 Modelling of Design Proposals

To calculate energy consumption loads for mechanical services, the CIBSE Building Energy Codes, calculation using the Degree Day Method and Edinburgh weather data for Space Heating and ventilation systems shall be used.

The occupancy, Equipment usage and departmental hours shall be identified by the Board. Any variations from this data proposed by Project Co shall be agreed with the Board prior to any modelling works commencing. Where assumptions are made by Project Co, these shall be in line with Good Industry Practice. This includes the application of factors set out in CIBSE Guide B for the thermal weight of the building, levels of operation and occupancy (Table B18.12), and the correction factor for the length of working day ( table B18.13) as appropriate.

The exact correction factors to be applied in the modelling shall be provided by the Bidders and agreed with the Board prior to any modelling works commencing.

The degree day figure used shall be 18.5° Celsius as the base.

Space heating/cooling should be assessed on the required temperatures that are indicated on the room data sheets that will be provided by the Board to Bidders.

Design calculations shall be based on an external winter condition appropriate to Edinburgh and shall be compliant with external winter conditions detailed in the CIBSE design guides.

Thermal conductivity values shall be at a minimum as stated in the Scottish Building Regulations (Technical Standards) and shall reflect the actual building fabric design proposals.

The clinical usage and departmental hours shall be as indicated by the Board and any variations from these shall be proposed by the Bidders shall be agreed with the Board prior to any modelling works commencing.

All ventilation plant should be assessed on a maximum power and pressure drop within the air distribution systems as stated in the Scottish Building Regulations (Technical Standards) and in-line with Good Industry Practice.

Domestic Hot Water (DHW), usage shall be based on a 24-hour usage period. Any variation to this shall be proposed by Bidders and agreed with the Board prior to any modelling works commencing.

The cold water storage provision should be based on a 24-hour day usage period. Any variation to this shall be proposed by Bidders and agreed with the Board prior to any modelling works commencing.

Lighting shall be modelled in accordance with the Board's Construction Requirements, Room Data Sheets and any specific guidance provided by the end-user through the Board.

All lighting designs shall comply with CIBSE lighting design guides and the general lighting strategy

proposed by Bidders and as detailed and agreed at Financial Close. Any variation to this shall be proposed by Bidders shall be agreed with the Board prior to any modelling works commencing.

The Dynamic Thermal Energy Model shall also be used by Bidders to show compliance of Project Co's Proposals with the Board's thermal and air quality requirements as identified in Section 3 (Board's Construction Requirements) of Schedule Part 6 (Construction Matters).

The dynamic simulation model shall use the CIBSE Design Summer Year (DSY) for Edinburgh in assessing the heating and, where required, cooling for each room within the Facilities. This information will inform the sizing of heating, ventilation and comfort cooling equipment within Project Co's Proposals.

The Dynamic Thermal Energy Model shall accurately model all proposed window/fenestration opening profiles, including taking in to account all constraints in the fenestration openings, including reveals, meshing and restrictors, when assessing overheating and air quality criteria for naturally ventilated rooms. Any automation and/or proposed opening parameters, for example temperature set points to open fenestration or any night time cooling strategies, shall be agreed in advance with the Authority.

The Dynamic Thermal Energy Model shall further allow for accurate thermal representation, and HVAC system sizing therein, for where doors are to be held open for operational or fire safety reasons.

## 2.2 Key Deliverable

The primary deliverable will be that Bidders shall provide detailed calculation and modelling documentation at design stage that demonstrates the proposed annual energy consumption of the Facilities by fuel type.

# Appendix G – Insurance Response Matrix Part 1 Insurance Costs Matrices

## A. Premium calculation for Construction Phase - Schedule Part 15 Section 1

Class of Required Insurance	Cover Period	Sum Insured/ Rateable Factor	Premium Rate	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
Contractors "All Risks" Insurance						
2. Contractors "All Risks" Terrorism Insurance <sup>1</sup>						
3. Delay in Start Up Insurance						
4. Delay in Start Up Terrorism Insurance <sup>2</sup>						
5. Construction Third Party Liability Insurance						
6. Insurances required by law						
TOTALS						

<sup>&</sup>lt;sup>1</sup> Bidder Note: whilst it is noted that the Terrorism Insurance will be renewable annually, the premium quoted in this table should represent the full cost for the duration of the Works.

<sup>&</sup>lt;sup>2</sup> Bidder Note: whilst it is noted that the Terrorism Insurance will be renewable annually, the premium quoted in this table should represent the full cost for the duration of the Works.

## B. Premium calculation for Policies to be taken out and maintained from the Actual Completion Date - Schedule Part 15 Section 2

Class of Required Insurance	Cover Period	Sum Insured/ Rateable Factor	Premium Rate	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
Property Damage "All Risks"     Insurance						
Property Damage "All Risks"     Terrorism Insurance						
Business Interruption     Insurance						
Business Interruption     Terrorism Insurance						
5. Third Party Public & Products Liability Insurance						
6. Insurances required by law						
TOTALS						

## C. Waiver of subrogation for Consort and Consort Parties

Please identify separately for all policies required by Schedule Part 15 Sections 1 and 2 the cost of obtaining a waiver of subrogation against Consort and Consort Parties including their respective suppliers and / or subcontractors of any tier pertaining to the RIE Project Agreement in accordance with clause 53.6.1 of the draft NPD Project Agreement.

Class of Required Insurance	Cover Period	Premium excluding IPT	Insurance Premium Tax (IPT)	Brokers remuneration (specify type and amount)
Contractors "All Risks" Insurance				
2. Delay in Start Up Insurance				
Construction Third Party Liability Insurance				
Insurances required by law (Construction Phase)				
5. Property Damage Insurance				
6. Business Interruption Insurance				
7. Third Party Public & Products Liability Insurance				
Insurances required by law (from Actual Completion Date)				
TOTALS				

## **Part 2 Insurance Technical Matrix**

## A. Schedule Part 15 Section 1 of NPD Project Agreement

Class of Insurance	Insurer(s) Identity (N.B. Including any co-insurers or excess layer insurers)	Deductible each and every claim (N.B. Confirm any aggregate Deductible if applicable)	Agreement to the requirements Clause 53 (Insurance) (If not please identify areas of variation or alternative proposals)	Agreement to the requirements of Schedules Part 15 (Insurance Requirement) and Schedule Part 25 (Insurance Proceeds Account Agreement) (If not please identify areas of variation or alternative proposals)
Contractors "All Risks" Insurance				
Delay in Start Up     Insurance				
Construction Third     Party Liability     Insurance				
Insurances     required by law				

## B. Schedule Part 15 Section 2 of NPD Project Agreement

Class of Insurance	Insurer(s) Identity (N.B. Including any co-insurers or excess layer insurers)	Deductible each and every claim (N.B. Confirm any aggregate Deductible if applicable)	Agreement to the requirements of Clause 53 (Insurance) (If not please identify areas of variation or alternative proposals)	Agreement to the requirements of Schedules Part 15 (Insurance Requirement) and Schedule Part 25 (Insurance Proceeds Account Agreement) (If not please identify areas of variation or alternative proposals)
Property Damage     "All Risks" Insurance				
Business Interruption Insurance				
Third Party Public &     Products Liability     Insurance				
Insurances required by law				

## Appendix H – Certificate of Non-Collusion and Non-Canvassing

### **CERTIFICATE OF NON-COLLUSION AND NON-CANVASSING**

We acknowledge that any Bidder who directly or indirectly canvasses any member, official or employee of Lothian Health Board ("the Board") concerning the award of any contract in relation to the Project to re-provide services from the Royal Hospital for Sick Children, Child and adolescent Mental Health Services and the Department of Clinical Neurosciences in a single building adjoining the Royal Infirmary of Edinburgh at Little France will be disqualified from the bidding process and any Bid submitted by or on their behalf shall be disregarded.

Therefore, we hereby certify and undertake and bind and oblige ourselves to the Board and its successors that we have not canvassed or solicited nor will we in the future canvass or solicit any member, official or employee of the Board in connection with the award of the Project or any Bid or proposed Bid in connection therewith and we certify that, to the best of our knowledge and belief having made reasonable enquiry, our Relevant Persons (as hereinafter defined) have not so canvassed or solicited.

In this certificate and undertaking, "Relevant Person" shall mean, as applicable in relation to us, any party co-operating with us in tendering for the Project, fellow tender consortium member, joint venture, controlling shareholder, subsidiary or parent company or other company within any group of which we form part, or any other person directly or indirectly controlling or controlled by us.

The essence of tendering is that the Board shall receive *bona fide* competitive Bids from all persons tendering. In recognition of this principle:

- I. We certify to the Board and its successors that the Bid submitted by us, or on our behalf, is a *bona fide* Bid, intended to be competitive and we have not fixed or adjusted the amount of the Bid or the rates or prices quoted therein by, or under, or in accordance with any agreement or arrangement with any other person.
- II. We also certify to the Board and its successors that we and, to the best of our knowledge and belief having made reasonable enquiry, our Relevant Persons have not done and we hereby undertake and bind and oblige ourselves that we will not do at any time, any of the following acts:
  - A. enter into any agreement or arrangement with any other person that he shall refrain from bidding or add to the amount of any Bid to be submitted; or
  - B. offer or agree to pay or give any sum of money, inducement or valuable consideration directly or indirectly to any person for doing or having done or causing to be done, any act or omission in relation to the Bid or any other tender submitted to the Board in relation to the Project.

	in capacity of	
Signature		
duly authorised to act on behalf of		

Date	
in the presence of	of
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## **Appendix I – Community Benefits**

### 1 SOCIAL CONSIDERATIONS / COMMUNITY BENEFITS OVERVIEW

## 1.1 Background

The Board recognises the very significant training and employment opportunities delivery of this Project can create for the wider community and beyond throughout the Project Term. The Board also recognises that the Project has the potential to drive significant initiatives relating to regeneration, sustainability and social benefits, aligning with the Board's strategic objectives.

The Board is therefore incorporating a range of social considerations/Community Benefits (CB) Requirements into its procurement which will ultimately form contractual requirements under and in terms of Clause 73 (Community Benefits) of the NPD Project Agreement.

Project Co will work in partnership with the Board and where appropriate, the Edinburgh Partnership and the agencies listed in section 3.6 to deliver the Board's CB Requirements in respect of both the construction and operational phases of the Project.

## 1.2 Overview of the Board's CB Requirements

These are set out in Section 2 and comprise requirements for the following -:

- Targeted Recruitment and Training /Employment and Skills Plan(Section 2.1)
- Supply Chain Development (SMEs) (Section 2.2)
- Supply Chain Development (Social Enterprises) (Section 2.3)
- General CB Requirements (Section 2.4)

## 1.3 Bid Submission Requirements

These are detailed in Section 3.

In broad terms the Board's CB Requirements are expressed in general terms. Bidders are given freedom to provide proposals that best fit their delivery structure and procedures, split into construction phase proposals and operational phase proposals. Bidders are, however, required to propose specific financial consequences for failing to deliver these proposals, such payments to be reflected in Clause 73 of the NPD Project Agreement.

Bidders' responses will comprise completion of the various submission requirements, which are more fully set out in Section 3, but can be summarised as follows:

Section	Submission requirement	Approach to scoring
Section 3.1: Employability and Training – Construction phase	Completed ESP Completed CB Method Statement	Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in
		section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD.
		A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.2 – Employability	Completed ESP	Scored in accordance with

Section	Submission requirement	Approach to scoring
and Training – Operational phase	Completed CB Method Statement	section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD.  A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.3 – Supply Chain Development, SME and Social Enterprise – Construction phase	Completed CB Method Statement for Construction phase	Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD.  A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.3 – Supply Chain Development, SME and Social Enterprise – Operational phase	Completed CB Method Statement for Operational phase	Scored in accordance with section B6 of Table A set out in paragraph 5.6.3 of Volume 1 of the ITPD, as also referred to in section B6 of Appendix (ii) (Submission Requirements) of Volume 1 of the ITPD.  A maximum of 25% of the Quality Evaluation Criteria Weighting will be applicable to this section.
Section 3.4 – Other Community Benefits	Bidders shall submit a Method Statement setting out any other proposals or measures they are willing to undertake to provide additional Community Benefits	Requirement to submit a Method Statement but not scored.

.Responses referred to here as "CB Method Statements" are referred to in the NPD Project Agreement as Project Co's Community Benefits Method Statements.

## 1.4 Role of Edinburgh Council

The Board is a partner in the Edinburgh Partnership, a community planning partnership for the city which brings together the public, community, voluntary and business sectors to deliver a better quality of life in Edinburgh. For further information see:

http://www.edinburgh.gov.uk/info/20162/edinburgh partnership/1446/about the edinburgh partnership

Members of the Partnership will not be precluded from working with Project Co to deliver the CB programme provided that any potential conflicts of interest are managed to the Board's satisfaction.

#### 2 THE BOARD'S COMMUNITY BENEFITS REQUIREMENTS

## 2.1 Targeted Recruitment & Training/Employment and Skills Plan

The Board is committed to assisting unemployed people, encouraging access to quality sustainable employment and providing training opportunities relating to deliver of the Project.

This may include on-site training and assessment, or offsite training, or a mix of these.

The Board, based on the approach outlined by Construction Skills, and using benchmarks suggested in guidance produced by them relevant to employability and training measures in major health projects, has identified the following required outputs and volumes.

Work Placement (16-19 years)	16
Work Placement (14-16 years)	4
Curriculum support activities	14
Graduates	3
Apprentice starts	11
Existing apprentices	10
Apprentice completions	3
Jobs advertised through local employment vehicles	7
N/SVQ starts for subcontractors	21
N/SVQ completions for subcontractors	18
Training Plans for subcontractors	5
Supervisor training for subcontractors	10
Leadership and management training for subcontractors	9
Advanced health and safety training for subcontractors	11

## 2.2 Supply Chain Development: SMEs

#### Context

The long term sustainable development of the SME base is vital to driving sustainable economic growth within Lothian, Scotland and beyond. The Board, in furtherance of its own objectives and those of the Edinburgh Partnership of which it forms part, recognises the need to support the development of the SME sector by developing a procurement approach which ensures their exposure to procurement opportunities related to the Project.

## Requirement

Project Co shall ensure that the Project Co advertises, and ensures that its sub-contractors:

 advertise all relevant subcontracts to be agreed with Bidders with reference to Bidders' method statements; and  allow SMEs equal opportunities to tender provided they have the appropriate capacity, experience and financial standing (and without leading to discrimination against others in the market).

An SME is defined as a company that is a small or medium-sized company and is not a member of a large group. An SME has a turnover of up to 50m Euro per annum and has no more than 250 employees.

#### Notes

Bidders may wish to contact the organisations listed in section 3.6 in the context of developing their proposals to meet the above.

## 2.3 Supply Chain Development: Social Enterprises

#### Context

The Board supports the Scottish Government's policy on Social Enterprise and believes that Social Enterprises have a distinct and valuable role to play in helping to create a strong, sustainable and socially inclusive economy.

A Social Enterprise is a business with primarily social objectives whose surpluses are principally reinvested for that social purpose in the business or in the community rather than being driven by the need to maximise profit for shareholders and owners. Social Enterprise is a business model which offers the prospect of a greater equity of economic power and a more sustainable society - by combining market efficiency with social and environmental justice.

The approach is founded on the principle of building relationships and partnerships by integrating a community development vision, social outcomes, business objectives and local and national government goals. Social Enterprises are involved in a wide range of industries, from recycling, community transport, landscaping, catering, employment and training to event management. In accordance with its broader objectives and its objectives through the Edinburgh Partnership, the Board wishes its procurement process ensures that Social Enterprises are made aware of supply chain opportunities offered by the Project.

## Requirements: General

Project Co shall ensure that Project Co shall advertise, and ensure that its sub-contractors:

- advertise all relevant subcontracts to be agreed with Bidders with reference to Bidders method statements; and
- allow Social Enterprises equal opportunities to tender provided they have the appropriate capacity, experience and financial standing (and without leading to discrimination against others in the market)

### Notes

Bidders may wish to contact the agencies listed in section 3.7 for information on Social Enterprises and/or in the context of developing their proposals to meet the above.

As part of the Scottish Government's strategy to create an enterprising third sector, social enterprises are preparing to increase activity with commercial contractors, utilising national and local training, capacity building and promotional measures. A register of social enterprises that are interested in contract delivery has been created at **www.readyforbusiness.org** to assist contractors to identify individual social enterprises and consortia, to assist planning with respect to community benefit delivery within a range of contract opportunities.

Scottish Government initiatives are supported by a Tender Preparation programme for Third Sector Organisations throughout Scotland that will be delivered through Scottish Government Contract by CEiS and the Supplier Development Programme in 2010/11. Through these programmes, significant support and resource is being allocated to support social enterprises to be ready to engage with companies delivering commercial contracts, and in particular within a community benefits framework to ensure that procurement activity contributes to meeting The Board's aims of having a robust social enterprise sector delivering social and environmental benefits in the city.

## 2.4 Other Community Benefits

Consistent with its broader objectives, including its objectives through the Edinburgh Partnership, the Board seeks to maximise Community Benefits delivered by the Project.

Accordingly, bidders will require to set out any additional Community Benefits that they would be willing to provide at no additional cost over the period of the contract. **Submissions on these additional benefits will not be scored** but the Board considers that such submissions could, for example, include additional Bidder proposals to:

- undertake educational initiatives with community, voluntary and charitable organisations relevant to the Project and not falling under 2.1 and 2.2 above; or
- support or contribute in some other way to the work of community, voluntary and charitable organisations associated with the Project.

Bidders will be at liberty to put forward other proposals.

Clause 73 of the NPD Project Agreement shall operate to contractually oblige Project Co to deliver additional Community Benefits that it puts forward.

### 2.5 General Community Benefits Requirements

## 2.5.1 Monitoring

Project Co will be required to provide monitoring information at least quarterly in a format to be agreed with the Board. The primary function of the monitoring information will be to enable the Board to measure and produce reports on Project Co's performance against the Community Benefits objectives.

## In particular:

- Targeted Recruitment and Training:
- Supply Chain Development (SMEs and Social Enterprises); and
- Other Benefits put forward by Project Co.

To comply with the Data Protection Act, all such monitoring and training documents must include a statement authorising Project Co to disclose personal data from the monitoring forms to the Board for the purposes of contract monitoring. This statement is to be signed by the individuals listed.

#### 2.5.2 Insurances

Project Co shall ensure that insurance cover includes people aged 16 and over and staff from employment and training organisations when on work experience on-site.

#### 2.5.3 Disclaimer

The Board will work with its partners to enable access to appropriate construction and operational training, jobseekers, SMEs and Social Enterprises to be available to Project Co.

This action, however, does not comprise or imply any promise on the part of the Board or their agents to provide suitable services, trainees, labour or resources.

Any action taken by the Board to facilitate relationships between Project Co and individuals/firms/agencies does not imply and should not be deemed to imply that they or its agents consider the individual, firm or agency as suitable for engagement by Project Co and/or its supply chain. Within this context, the Board will work with local agencies to help facilitate the achievement of the Community Benefits Requirements.

#### 3 BID SUBMISSION REQUIREMENTS

Bid submission requirements in respect of the Board's CB requirements are summarised at 1.3 above. The following sets out the detail required.

## 3.1 Employment and Skills Plan: Construction Phase

Bidders are required to complete an Employment and Skills Plan (ESP) covering the employment and skills areas from the table below (as extended by the Bidder to cover the full period of construction). For further information on each of these categories, Bidders are referred to Construction Skills in Scotland's document "Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland" (and Appendix A in particular).

Benchmarks are provided in 2.1 and constitute minimum outputs for Bidders' ESPs. Bidders are to use their own judgement as to what outputs beyond those minimums they consider are ultimately achievable in relation to the Project.

The output figures for the ESP should indicate the minimum outputs for each month against the relevant employment and skills areas. The "Summary" columns are also to be completed. Guidance on the employment and skills areas is also included within Construction Skills in Scotland's document "Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland" (and Appendix A in particular).

Bidders are required to provide an unequivocal statement alongside their ESP that, if appointed, they will be contractually bound to deliver against what they have set out in the ESP, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement.

## TEMPLATE EMPLOYMENT AND SKILLS PLAN (ESP)

Emp	oloyment and Skills areas	Month	Month 2	Month			Month	Month 7	Month	Month 9	Month 10	Month 11	Month 12	Summ
1	Work Placement (16.10 years)	1		3	4	5	6	1	8	9	10	11	12	<b>No</b> 16
1.	Work Placement (16-19 years)  – persons													10
2.	Work Placement (14-16 years)  – persons													4
3.	Curriculum Support Activities – individual engagement													14
4.	Graduates – persons													3
5.	Apprentice Starts - persons													11
6.	Existing apprentices - persons													10
7.	Apprentice Completions - persons													3
8.	Jobs Advertised Through proximate Employment Vehicles - number													7
9.	N/SVQ Starts for Subcontractors - persons													21
10.	N/SVQ Completions for Subcontractors - persons													18
11.	Training Plans for Subcontractors - number													5
12.	Supervisor Training for Subcontractors - persons													10
13.	Leadership and Management Training for Subcontractors - persons													9
14.	Advanced Health and Safety Training for Subcontractors - persons													11

### **Employment and Skills Method Statement**

Bidders are also required to provide a detailed CB Method Statement setting out how they intend to implement the employment and training requirements of the Board and to deliver the ESP. The CB Method Statement should be restricted to **1000** words and clearly set out the proposed approach for delivering skills development against the employment and skills areas, covering the following:

- who in the organisation will be responsible for managing the training scheme and overseeing the proposals?
- which education and training providers will be involved with the delivery of the ESP?
- what types of accredited and non-accredited training are expected to be offered and who are expected to be the main beneficiaries of this training?
- which trades or occupational areas is it envisaged will be offering apprenticeship opportunities?
- what types of apprenticeships are expected to be offered (i.e., traditional programme led, advanced etc)?
- how will the target outputs as set out in the ESP be delivered?
- how will health and safety issues be managed?
- what actions will be taken to ensure the support of trade contractors and subcontractors working on the project?
- how will compliance be managed and monitored with respect to the organisation's trade contractors and sub-contractors?
- how will the target outputs as set out in the ESP be delivered?
- how will health and safety issues be managed?
- How will monitoring of delivery of Community Benefits and reporting to the Board under Clause 73 of the NPD Project Agreement be undertaken?
- What financial consequence the bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against the ESP.

Bidders are referred to Construction Skills in Scotland's document "Client Based Approach to developing an Employment and Skills Strategy on construction projects in Scotland" (and Appendix A in particular) for further information and Appendix B of that document in particular.

## 3.2 Employment and skills plan: operational phase

Bidders should repeat the process outlined for the construction phase in respect of the operational phase (though the table should be completed not on a monthly basis but on an annual basis).

*Note:* The desired/expected outputs set out at Section 2.1 are for the Construction Phase only. The Board does not have desired/expected output figures for this element and it is a matter for bidders to consider, as against their specific approach to delivery.

## 3.3 Supply Chain Development: SMEs & Social Enterprise

Each Bidder must complete two separate CB Method Statements in accordance with the detail set out below, detailing what it proposes to do to meet the Board's SME and Social Enterprise supplier development objectives in respect of both the Construction Phase and Operational Phase (800 word limit for each).

Bidders will be expected to have identified a source for any additional resources they will require to deliver the SME and Social Enterprise development, so that the requirements can be met with no additional costs to the Board. As part of the bid preparation, the Board expects Bidders to have contacted the agencies listed in Section 3.6 or other similar agencies of their choice.

Bidders are required to provide an unequivocal statement in the CB Method Statement that, if appointed, they will be contractually bound to deliver against what they have set out in their CB Method Statements, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement and the financial consequence the Bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against what they have set out.

The Small to Medium sized Enterprises / Social Enterprises CB Method Statements must respond to the following questions (NOTE: Separate responses are to be provided for the Construction Phase and the Operational Phase):

- Describe the activities that you will undertake to identify SMEs and Social Enterprises and assess each sector separately in their capacity to deliver works, services or supplies, that are required for all contracts in relation to the Project.
- 2. Please quantify, both in hours and value, the commitment of you and your sub-contractors, in relation to this project, to the engagement with SME / SEs in specific capacity building support and in the development of partnership working and outline your overall approach.
- 3. How will you ensure that your sub-contractors make all opportunities available to SMEs and Social Enterprises?
- 4. Describe the anticipated outcomes for SMEs and Social Enterprises from the activities you have outlined in response to Q2 and Q3 and how would you monitor and assess the social and economic impact of your engagement with SMEs and Social Enterprises?
- 5. How you will monitor delivery of Community Benefits and report to the Board under Clause 73 of the NPD Project Agreement?

## 3.4 Other Community Benefits

Bidders must provide a CB Method Statement setting out any other Community Benefits they are willing to deliver (see Section 2.4) and their proposals to monitor delivery of Community Benefits and report to the Board under Clause 73 of the NPD Project Agreement (note: this CB Method Statement will not be scored).

Bidders are required to provide an unequivocal statement in the CB Method Statement that, if appointed, they will be contractually bound to deliver against what they have set out in their CB Method Statements, in accordance with the terms and conditions set out in Clause 73 of the NPD Project Agreement and the financial consequence the Bidder proposes to include, for the purposes of clause 73 of the NPD Project Agreement, for failure to deliver against what they have set out. (800 word limit)

## 3.5 FOR INFORMATION ONLY - SUPPORT AGENCIES

#### **POSSIBLE RESOURCES**

Note: Any action taken by the Board to facilitate relationships between Project Co and individuals/firms/agencies does not imply and should not be deemed to imply that they or its agents consider the individual, firm or agency as suitable for engagement by Project Co and/or its supply chain. Within this context, the Board will work with local agencies to help facilitate the achievement of the Community Benefits Requirements.

## 3.6.1 Recruitment and Training.

Agency	Remit	Contact	Position	Contact No.	<u>Email</u>	Web
Sector Skills CLIENTs :						
Construction Skills	Sector Skills for construction main trades. Advice on training and funding	Hugh McCafferty	Operation s Manager			http://www.constructionskills.net/
EU Skills	Sector Skills for Utilities, Gas and heating plumbers. Advice on training & funding	Jim Brown	Skills Director Scotland			www.euskills.co.uk
Summit Skills	Sector Skills for Electrical, Plumbing & Building Services. Advice on training and funding	Ian Stirrat	Operation s Manger			http://www.summitskills.org.uk
Edinburgh Partnership	Its role is to lead joint activity on issues facing the city and those living and working here	Saty Kaur				http://www.edinburghnp.org.uk

## 3.6.2 SMEs

Agency	Remit	Contact	Position	Contact No.	Email	Web
Federation of Small Businesses	FSB Scotland campaigns for a better social, political and economic environment to work, learn and do business in.	Stewart Farmer	Regional Organiser (West of Scotland)			http://www.fsb.org.uk
Scottish Enterprise	SE help ambitious businesses in Scotland to grow and become more successful. SE support key industry sectors and develop the business environment to enhance Scotland's economy	Jillian Moffat				http://www.scottish- enterprise.com

## **Social Enterprises**

Agency	Remit	Contact	Position	Contact No.	Email	Web
Edinburgh Chamber of Commerce	Dynamic member-led organisation, working to support the local business community and specifically our strong network of member businesses.			0131 221 2999		http://www.edinburghchamber.co.uk
Ready For Business	Business support Services for SEs	Roddy Stewart	Business Adviser			http://www.ceis.org.uk
Craigmillar & District Business Association	Association was created to provide a local networking and information forum for established businesses, local entrepreneurs and individuals within the Craigmillar area.			0131 661 8888	info@cre8te.co.uk	www.cdba.org.uk
Community Renewal	Work in local communities to and small	Nigel Green	Co- ordinator Edinburg		<u>k</u>	http://www.communityrenewal.org.uk/

	neighbourhood s to improve the wellbeing of families.	h			
WEACT (Stevenson College)	WEACT is our community-based employability organisation offering a range of services to clients across Edinburgh.		0131 447 2800 or 0773300105 2	weact@stevenson.ac.uk	WEACT is our community-based employability organisation offering a range of services to clients across Edinburgh.

## 3.6.3 Other Sources

Agency	Contact No.	<u>Address</u>	Web
Job Centres:			
New Town	0845 604 3719		https://www.gov.uk/contact-jobcentre-plus
Edinburgh	0045 004 0740	00 111 1 151 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
East Lothian	0845 604 3719	20 High Riggs, Edinburgh, Lothian.	
North House			
	0845 604 3719	Eskmills Park Station Road, Musselburgh,	
		Midlothian.	
Schools:			
0 11 1	0404 004 4000	00.0	
Castlebrae Community High	0131 661 1282	2A Greendykes Road Edinburgh, Midlothian, EH16 4DP	http://castlebrae.org.uk/
School		401	
Portobello High	0131 669 2324	10 Duddingston Road	http://portobellohighschool.org.uk
School		Edinburgh	
		EH15 1NF	
Holyrood	0131 661 5871	55 Duddingston Road West, Edinburgh, EH15 3ST	http://www.holyroodedin.ik.org/home.ikm
High School		, 3,	, , , , , , , , , , , , , , , , , , ,
		328 Gilmerton Road, Edinburgh, EH17 7PT	www.liberton.edin.sch.uk/
Liberton High	0131 664 7514		
School		Lasswade Road, Edinburgh, EH16 6TZ.	
		Lasswade Road, Edinburgh, E1110 012.	www.gracemounthighschool.co.uk/
Gracemount High	0131 664 7440		
School			

Colleges:			
Jewel and Esk Valley College	0131 669 4400	Milton Road Campus, 24 Milton Road, EH15 2PP.	http://www.jec.ac.uk/
Queen Margaret University	0131 474 0000	QMU Drive, Musselburgh, EH21 6UU.  Bankhead Avenue, Edinburgh, EH11 4DE.	http://www.qmu.ac.uk/
Stevenson College	0131 535 4600		www.stevenson.ac.uk/

## **Appendix J - BIM Requirements for the Project**

### 1. Project Set-up

- 1.1 Bidders are required to prepare a BIM Execution Plan for review by the Board. The BIM Execution Plan shall cover as a minimum the following topics:
  - b) Project information/description;
  - c) Key BIM stakeholders;
  - d) Goals and project objectives;
  - e) BIM objectives and uses;
  - f) Model management;
  - g) BIM deliverables and format;
  - h) Quality control system;
  - i) Data management; and
  - j) Frequency and content of BIM audits.
- 1.2 The BIM execution plan is to be prepared in accordance with BS 1192.
- 1.3 Bidders must use recognised industry BIM software platforms, suited to the various tasks to be fulfilled by both the design team and the supply chain, and establish principles of interoperability.
- 1.4 Bidders will provide a BIM overlay to the design team process map.
- 1.5 Bidders will appoint an Information Manager to see that the common data environment is set up and maintained and that the mechanism and technology for information exchange are in place and adhered to throughout the Construction Phase and the Operational Term.
- 1.6 Bidders will establish a through-life information management strategy including graphical and non-graphical information. Agree format for transfer of information into asset management systems will be developed, and a data classification system (eg Uniclass 2) established.
- 1.7 A Soft Landings implementation plan will be developed that follows the principles of the Government Soft Landings plan Policy dated September 2012.

## 2. Pre-construction Phase

- 2.1 3D visualisations, walk-throughs and images for User, Local Authority and other Stakeholder presentations and discussions at key project milestones are to be prepared.
- 2.2 Room layouts are to be prepared using ADB to include fully loaded 3D views.

- 2.3 The model is to include performance targets for key indicators, associated with associated provision in the design to measure data in operation and allow model-based comparisons between design intent and actual performance.
- 2.4 Data outputs in COBie format are to be prepared at key stages aligned to the process map, at a Level of Detail matching the stage requirement.
- 2.5 Specifications are to be based on a system that allows direct links between spatial BIM Models and the accompanying specifications and object attributes.
- 2.6 Read-only access to the BIM model gratis and within 24 hours is to be made available at the Board's request.

### 3. Construction Phase

- 3.1 The Board is to have read-only access to 4D construction sequencing output from model.
- 3.2 The model is to be regularly updated (every 2 weeks) to reflect material/component detailed selections or variations from those selected at design/tender stage.
- 3.3 Read-only access to the BIM model gratis and within 24 hours is to be made available at the Board's request.

## 4. Operational Term

- 4.1 The model shall be maintained throughout the Operational Term to reflect all planned maintenance and lifecycle works and modification should be made to reflect all changes implemented under Schedule 16 Change Protocol.
- 4.2 Read-only access to BIM model, gratis, and within 24 hours is to be made available at the Board's request.
- 4.3 Asset Management software is to be discussed with the Board but data should be held in recognised interchange format (e.g. COBie) to allow interoperability between recognised facilities management (CAFM) packages, recognised asset management packages and the BIM model.

### 5. Handback

- 5.1 Project Co will hand over ownership of the model to the Board at the Expiry Date.
- 5.2 At the Expiry Date, the model is to be fully updated model to reflect all changes during the Operational Term including specification details, operation and maintenance requirements and residual design life of all components and assemblies.
- 5.3 The on-going maintenance and replacement information is to be in a format to be agreed with the Board.
- 5.4 Project Co shall provide training in the operation of software to the Board.

## **Operational Functionality Clarification**

**Date:** 9 May 2013

Bidders are aware that the procurement is proceeding on the basis of a Reference Design that the Board spent some time developing with significant clinical and stakeholder input prior to commencement of the Procurement. However, as set out in the ITPD, the Board reserves the right to amend the technical information provided.

The Board will consider, and may accept, changes to the Mandatory Reference Design Requirements (i.e. those elements relating to Operational Functionality) where a Bidder considers that those Mandatory Reference Design Requirements are not capable of meeting the Board's requirements (as described in paragraph 5.2.2 of Volume 1 of the ITPD).

The process to be adopted by Bidders in this regard is as follows:

- in the event that a Bidder considers that the Board's requirements cannot be delivered as a result of a specific Mandatory Reference Design Requirement, then the Bidder should notify the Board as to the specific element of the Reference Design where this is the case. Bidders must explain why the Board's requirements cannot be delivered and provide supporting information. In addition, alternative design proposals to comply with the Board's requirements shall be submitted by the Bidders as part of their Informal Submission for the next Dialogue Meeting;
- the Board will review whether they agree that the Reference Design does not comply with the Board's requirements and if so whether the alternative design proposals are acceptable (or any comments they have on the alternative design proposals);
- the Board will confirm to the relevant Bidder whether they agree and, if so, any comments the Board have on the alternative design proposals. In the event that this is agreed then the mandatory status of this element of the Reference Design will be relaxed.

In addition to the above, Bidders are reminded of the definition of Operational Functionality within Volume 1 of the ITPD. Operational Functionality has the meaning set out in five different subsections ((a)-(e)) within the definition. In relation to all of ((a)-(e)) the meaning of Operational Functionality is then further clarified as follows:

"but only insofar as each of the matters listed in (a) to (e) above relate to or affect Operational Use".

The Board confirms that the drafting in the ITPD around Operational Functionality is not intended to mandate elements of the Reference Design which demonstrably do not affect or impact Operational Use (excluding Non-Clinical Services). For example, this would mean that consequential adjacencies could be amended. Consequential adjacencies are those adjacencies which occur in the Reference Design but not for any intentional operational reason.

For the avoidance of doubt, Bidders are advised that the Board shall be entitled to reject any proposed change which it considers does affect Operational Use (excluding Non-Clinical Services).



## SCOTTISH HOSPITALS INQUIRY

Hearing commencing on 24 April 2023

Bundle 2 - Reference Design and Invitation To Participate in Dialogue ("ITPD") Documents