

Midland Metropolitan Hospital

Final Business Case

January 2016

Appendices Volume 3



Where
EVERYONE
Matters



APPENDIX 11a – DRAFT STAGE TWO DUE DILIGENCE REPORTS

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case

Midland Metropolitan Project

Project Agreement Commentary

Project Agreement Version ITPD Stage 2/3 Interim Submission [2.4.15]

Rows highlighted red. Ashurst consider will not be acceptable to a funder. We expect all red issues to be cleared before end of dialogue.
Rows highlighted amber are comments which may be acceptable to certain funders but Ashurst will have to report on these issues.
Rows highlighted green. These have been agreed by the Trust.
Rows highlighted blue are comments referred to the shadow funders' due diligence Technical Adviser.
Rows highlighted purple are comments referred to the shadow funders' Insurance Adviser.
Where issues (i) have been raised and agreed with the Trust or (ii) the item is clarificatory the row is left white.

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
1.	7.2.4 Trust Title Warranty	We have seen the amendments requested by Bidder to 7.2.4.	Position on Title Warranty and Specific Title Matters (Schedule 7) to be clarified. We understand that the position regarding Adverse Rights is outstanding but that there will be <u>no</u> Specific Title Matters to disclose.	
2.	7.2.5 Trust Title Warranty	We understand the Bidder has requested this to be deleted.	This will be deleted.	
3.	7.3 Tax Compliance		An obligation on shareholders other than HMTCo to disclose any tax non-compliance and to agree for the purposes of 7.3.5 any transfer of shares is enclosed in the UK Standard	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
	Warranty		Equity Document.	
4.	8.7 Excusing Cause (unforeseen ground conditions)	Deletion of SF3 8.7.8	Removal by Trust of Excusing Cause for unforeseen ground conditions and/or Contamination under existing buildings to be discussed with TA and Funders. It is understood Carillion are prepared to take ground condition and contamination risk and that this will be passed down to the Contractor and therefore no additional Excusing Cause would be required.	
5.	14.5.1 Access Following Construction	This clause should be deleted. The definition has been deleted and we understand the Bidder has requested deletion.	Since there is a title warranty and disclosure only of specific matters, Title Deeds will not be supplied (definition deleted). The Trust will need to advise ProjectCo of any specific requirements. Agreed to be deleted.	
6.	15.1 The Site		Demolition and remediation works are being carried out by the Trust. Project Co may need collateral warranties from contractors. TA to review whether remediation has been to an acceptable standard and is complete and scope of appointments to assess risk being assumed here by Project Co. Note: Project Co o/s issue in relation to "Site Boundary", "Canal Bridge" and "Site Plan". To be clarified. Capita may warrant their report.	
7.	15.1A Project Co Lease		Terms of Project Lease to be reviewed in due course but principal should be acceptable. Note: we understand that retail arrangements and drafting are outstanding but matrix submitted has been agreed by the Trust.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
8.	16.2 Consents and Planning Approval		TA to comment on split of responsibilities regarding Consents and the Project Co indemnity when detailed planning obtained.	
9.	17.1A Advance Works		To review how Advance Works are to be dealt with and whether certified by the Independent Tester. See comment on 17.6 below.	
10.	17.3 Thermal and Energy Efficiency		TA's comment on target of 42 gigajoules/100m ³ as energy efficiency target. TA's initial view is this is acceptable.	
11.	17.4B Thermal Energy Efficiency		TA's comment on achieving a BREEAM 2011 Healthcare "Excellent" Score under ENE01 indicates this is achievable.	
12.	17.6 Trust Design Approval	Query whether specific reference to the Advance Works should be included.	We understand Advance Works will be site preparation only and this may not be necessary.	
13.	18.3A Trust Monitoring		It is noted that the issue relating to notification of ProjectCo by the Trust of a breach of ProjectCo's obligations under clause 28 and a right for ProjectCo to remedy before the Trust exercises its rights of access and remedy is with IUK for comment. Trust has agreed 18.3A can be deleted.	
14.	22 Pre-Completion		Provision of Final Commissioning Programme. TA's view is that this is satisfactory.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
	Commissioning and Completion			
15.	22.13A Completion Certificate		TA to comment on timing of Snagging Matter rectification.	
16.	22.14 Completion Certificate	Delete reference to "New" with regard to "Facilities".	Not a defined term. To be amended.	
17.	22A Snagging Matters	[Drafting missing?]	To be supplied.	
18.	27.6 Trust Services		Interface Protocol to be reviewed.	
19.	29.8.4		We understand that recovery being limited to incremental administrative costs has been requested by the Bidder and refund IUK. Carillion has withdrawn its comment. Query risk now passed to Hard FM.	
20.	30/31 TUPE/Pensions		Position relating to TUPE and new pensions drafting to be confirmed.	
21.	35.2 Payment	Query whether each report will show deductions for the immediately preceding month or whether they will be deductions	Deductions to be made in respect of the prior period to allow time for calculation.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
		for the period two months prior.		
22.	35.8 Set Off	Query exclude from the operation of 35.8 any capital contributions to be made by the Trust.	Funders will not wish the Trust to be able to make any deduction from sums otherwise due although it is accepted that this is unlikely given that capital contributions are to be made before the Unitary Charge commences. This has been accepted on another closed deal.	
23.	35.11 Capital Payments		It would be helpful to understand how the timing of the capital contributions to be made by the Trust in the context of when payments will be made by ProjectCo to the Contractor. If the TA could be appointed to sign off works complete for the purposes of the Construction Contract and the Project Agreement that will assist. It would also be helpful to understand the timing of the right to suspend the Works with payment obligations due to the Contractor. It is noted that the Trust contributions are not currently to be paid into a separate capital contributions account in advance of the due date. To be discussed with Funders. We understand that Trust contributions were not paid into a separate account on another closed project. To be reviewed in context of timing of payment to Contractor.	
24.	36.8 Insurance	The definition of "Trust Party" for the purposes of the insurance waiver of subrogation should not include sub-contractors of any tier but should limit the provision to NHS organisations.	It will not be possible to agree with insurers waiver of this obligation for all contractors and sub-contractors of a Trust. The issue is being resolved with the Trust and insurers to limit the definition of Trust Party for this clause.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
25.	39 Changes in Law		It is understood that further amendments will be required to incorporate an agreed position in relation to Emissions Specific Change in Law and Carbon Reduction Commitment. Drafting being agreed between Trust and Cerillion.	
26.	39.3.3 Capex Change in Law		We understand that Project Co/Trust discussions are ongoing about the minimum amount for Capex Change in Law.	
27.	41.11 Compensation Event		It is believed no Title Specific Compensation Events are required.	
28.	44.1.2 Project Co Events of Default		Long Stop Date of 18 months. [Note that "Long Stop Date" defined in clause 42.2.2(c)(ii) as "12 months"]	
			Note: New Project Co Events of Default to be inserted in relation to non-compliance with paragraph 1 (Direction Order), 2 (Future Service Benefits) and 3 (Funding) of new pensions schedule. Wording to be reviewed in due course.	
29.	44.1.9 Project Co Events of Default		TA to comment on Service Failure Points as regards termination. Work ongoing. There is no longer an additional period relating to rectification as regards the accrual of SFPs. The TA has raised this issue.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
30.	44.1.11 Persistent Breach		TA to comment on calibration (see definition in Schedule 1). Work ongoing.	
31.	44.3 Rectification	Include in 44.3.2(b) and (c) and 44.3.4(b) the following remediable events: 44.1.4 (abandonment) 44.1.5 (ceasing to provide Services) 44.1.9 (service failure points)	To discuss with Funders the right to remedy these defaults as per SF3.	
32.	44.10 Transfer of Assets on Project Co Events of Default		Project Co raised an issue on this with IUK. IUK have confirmed the provision can be deleted.	
33.	44B.2 Termination for Breach of Refinancing	Add new clause 44B.6: "On termination under clause 44B.2 above the Trust shall pay within thirty (30) days of the Notice Date following termination to Project Co on amount equal to the amount payable in accordance with Schedule 23 (Compensation on Termination) Part D (Corrupt	Need provisions equivalent to 44C.1.4 to provide for payment of compensation in accordance with Schedule 23 Part D.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
		Gifts and Fraud)".		
34.	45.1.2 Trust Events of Default		See above comment on clause 35.11 re timing of capital contribution and amount of work Contractor may have done before there is a right to suspend/terminate.	
35.	46.2 Termination at Trust Break Point		To discuss Trust Break Point Date with Funders and particular level of compensation to be paid.	
36.	48.5 Compensation on Termination	Add "or clause 44C (Termination for Breach of Tax Warranty)". Also provide for 44A.	Missing. See clause 44C.1.4. To ensure payment of compensation on termination for this event of default.	
37.	48.12 Rights of Set Off	Add reference to clauses 44A, 44B and 44C.	To ensure no Trust rights of set off against Senior Debt termination amount for termination on these two events of default.	
38.	50.8 Changes in Control		Project Co raised an issue on this with IUK but the amendment was rejected. Matter to be dealt with in Shareholder Agreement.	
	Schedule 1 (Definitions)			
39.	"Advance Works"		Review of Advance Works Agreement to take place.	
40.	"Ancillary Rights"	Reinstate with revised definition	We are aware of Bidder's proposal.	
41.	"Base Case Equity IRR"		To be advised	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
42.	"Buffer Value"		Amount to be advised.	
43.	"Senior Credit Agreement"		"or" before "without prejudice" to be reinstated.	
44.	"Senior Funding Agreements"		Reference to clause "4.3" to be amended to "4.2".	
45.	"Trust Break Point"		Funders to consider break at 15 years from the date of the agreement.	
46.	"Trust Party"		We are aware of Bidder position regarding Retail Tenants.	
	Schedule 6 (Funders Direct Agreement)			
47.	"Enforcement Event"		This should be defined as an Event of Default under the Senior Credit Agreement.	
48.	Paragraph 4.4		The reference to the Dispute Resolution Procedure in the Project Agreement is incorrect since Funders are not a party to the Project Agreement. There can be a separate mirror for Dispute Resolution Procedure.	
49.	Paragraph 12.8		Check whether Trust a party to any other collateral agreements and to which this paragraph 12.8 should therefore apply.	
	Schedule 10 (Review Procedure)			

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
50.	Table A		TA considers time periods to be acceptable.	
	Schedule 11 (Collateral Warranties)			
51.	Schedule 12 (Commissioning)		We understand the TA has raised some issues.	
52.			We are aware of Bidder comments.	
	Schedule 13 (Equipment)			
53.			TA has raised queries on equipment responsibility matrix	
	Schedule 14 (Service Requirements)			
54.			TA has queries.	
	Schedule 15 (Independent Tester Agreement)			
55.	Independent Tester Appointment		Scope of appointment to be confirmed with Funders, Advance Works considered to be unsophisticated i.e. no piling foundations permanent structures and therefore need not be included. Clause 22.19-22.22 (Wi Fi Post Completion Tests) and clause 35.11-35.13 (Capital Payments).	
56.	Paragraph 9.1	Amend as follows: "with the	This is likely to be accepted.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
		exception of liability for death, personal injury, <u>liability for fraud, abandonment, corruption or wilful default</u> and/or any other liability that cannot lawfully be excluded or limited <u>(for which the Independent Tester's liability shall be unlimited)</u> the Independent Tester's maximum aggregate liability to all parties under or in connection with this Deed, whether in contract or in tort or for breach of statutory duty is limited to ten million pounds (£10,000,000)".		
57.		Add to paragraph 11.2 "or, by way of security to the Funder under the Funding Agreements" after "assignee or transferee".	TA to review: <ul style="list-style-type: none"> Appendix 1 – scope of appointment. See comment at clause 20.1 above. Liability cap of £10 million. Fee to be agreed (paragraph 4.1). 	
	Schedule 18 (Payment Mechanism)			
58.	17.4A and Project Co Appendix L4.1g (CRC Drafting Mark-Up) for		Paragraph 15.9.2 of the CRC Drafting Mark-up makes Project Co responsible inter alia for CRC Emissions resulting from supply of Energy to the [FM Leased Areas] post Actual	

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	Schedule 18		Practical Completion <u>but</u> footnote 1 to the CRC Drafting Mark-up suggests that Trust should account for the FM Leased Areas and recover the cost back through the FM Areas Lease. We understand the clause not the footnote is correct.	
	Schedule 21 (Insurance Requirements)			
59.	Part 1, para 3.4 Part 2, para 3.4		Indemnity Period to be agreed.	
60.	Broker's letter of undertaking		We are aware of comments made by the Bidder. Funders to confirm.	
61.			Insurance Adviser to comment.	
	Schedule 22 (Variation Procedure)			
62.	"Small Works"		TA comment on £5,000 as the amount below which Works will be regarded as Small Works. Acceptable.	
63.	"Works Variation Capital Limit"/"Works Variation Delay Limit"		TA comment on 5% of capital value and three months respectively. If the variation cost (or cumulative figure for all variations) is likely to exceed this then Project Co can object. Considered reasonable.	
64.	Part 1 Paragraph 8		TA comment on capital expenditure for requiring competitive tenders at £150,000. Reasonable. Query number of tenders.	

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65.	Part 3 Paragraph 2.2		TA comment on adjustment to Monthly Service Fee as a result of Two Stage Variation. Acceptable.	
66.	Part 4 Paragraph 2.1		TA comment on capex limit. Acceptable.	
67.	Part 5 Paragraph 2.4.1		TA comment on threshold for adjustment to Financial Model as a result of a Qualifying Variation. The levels seem low leading to additional costs of running the model.	
	Schedule 24 (Handback Procedure)			
68.			Funder to confirm whether "no later than 18 months prior to the Expiry Date.." period for the joint inspection of the Facilities is acceptable in the light of the length of the tail on the debt.	
	Schedule 25 (Record Provisions)			
69.			To discuss with Funders. Some of the provisions are onerous, e.g. "best accountancy practice" (paragraph 3), "when requested" (not reasonably). IUK may not permit a change.	
	Schedule 29 (Refinancing) definitions			
70.			These definitions will need to be reviewed once Funders and funding arrangements are known, for example add any	

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			Common terms Agreement definitions required.	
	Schedule 29 (Refinancing)			
71.			Cross-referencing needs to be checked for example reference to "paragraph 6" at end of 9.3.2 should be to paragraph 7.	
	Schedule 35 (Commercially Sensitive Information)			
72.			Funders to review Parts 1 and 2 to confirm that there are no further items which should be included in these lists, from their point of view.	

Midland Metropolitan Project
Construction Agreement Commentary
Construction Agreement submitted with ITPD Stage 2/3 Interim Submission [2.4.15]
The Hospital Company (Sandwell) Limited ("Project Co")
Carillion Construction Limited ("Contractor")
NB: Security Package to be discussed

Rows highlighted red. Ashurst consider will not be acceptable to a funder. We expect all red issues to be cleared before end of dialogue.
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Rows highlighted green. These have been agreed by the Trust.
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Where issues (i) have been raised and Contractor has agreed to drafting changes or (ii) the item is clarificatory only, the row is coloured white.

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1.	1.2(e)		To clarify the due date/final date for payment of the invoice, for HGCRA purposes as clause 1.2(e) refers to 90 Business Days and 1.2A to a different period.	

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2.	1.2B		Contractor should only be entitled to an extension of time for Compensation Events under the PA or Project Co Delay Events (see below).	
3.	2.2		If Funders do require collateral warranties from Key Designers then these will need to be provided at close and not within 40 Business Days after close. We understand they are proposed for Architect Structures, M&E Equipment Designs.	
4.	4A.3		The relevant provisions from the Funding Agreement acknowledged by the Contractor will need to be agreed.	
5.	5.4	Delete reference to "good faith".	There is no good faith obligation at Project Agreement level. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
6.	5.4A	Delete reference to "procuring that the Trust co-operates in the fulfilment of the purposes and intent of the Project Agreement."	Project Co is not in a position to procure what the Trust will do. It can use reasonable endeavours to enforce the rights that Project Co has. The Contractor will require Project Co to enforce Project Co's rights. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
7.	6.7/6.10		Security package to be agreed.	

Comment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
8.	8.1		Position of indemnities under 8 and liability caps to be discussed with Funder. Reference to clause 9.6 (Cap) and 9.8 (Exclusion from Cap) are confusing. We understand that clarificatory amendments will be made such that the indemnities will be subject to the caps in 9.6 but the caps are excluded where 9.8 applied.	
9.	9.1		Exclude the obligation to pay LDs from the restriction on recovery. We understand a clarification will be made.	
10.	9.2A		Query whether this should be without prejudice to the position under the indemnities given in 8.1. Contractor believes drafting is clear.	
11.	9		References to "(Sole Remedy)" after each sub-clause to be deleted since the whole of the section is headed "Sole Remedy" and not the individual clauses.	
12.	9.6		To discuss whether interface liability should be included in the cap. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
13.	9.6A		Drafting suggests it is acceptable for there to be an obligation on Project Co to extend the LD cap. We understand a similar provision has been accepted on other closed transactions by EIB and other funders. We understand the drafting will be changed. There should be a limit so that	

Comment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
			the cap is only increased once.	
14.	9.7A		<p>To discuss with Funders whether liability for wilful default will be limited to 100% of the Contract Sum rather than be unlimited.</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p>	
15.	9.7C		<p>Query whether there should be any recognition of loss as regards a return on third party equity given equity funding competition.</p> <p>Drafting to be considered in Equity Funding Compensation.</p> <p>Drafting on breakage costs requires amendment.</p>	
16.	9.7		<p>To discuss with Funders and TA the cap on liability for deductions at 3% of the Contract Sum.</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p> <p>TA would wish to review the Interface Agreement.</p>	
17.	9.8		<p>Other exclusions from the cap should include costs to complete and enforcement costs. Limb (e) refers to the Interface but clause 9.6 includes interface liabilities.</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p>	

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18.	10.4		The Contractor should acknowledge the Specific Title Matters. We understand there may be none and that the PA language will be followed.	
19.	16		TA to comment on the division of responsibility for Consents.	
20.	17.4B		The period for obtaining BREEAM 2011 Healthcare "Excellent" Score under ENEO1 will be amended to the date six months after the Actual Completion Date in line with the Project Agreement refers to six months.	
21.	19.8		<p>The consequence if it is not possible to demonstrate that Completion can be achieved by the Long Stop Date. It appears to be preparation for termination rather than an accelerated right.</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p>	
22.	20.4		Copies of the Report should be delivered to the Funders/the Independent Tester.	
23.	22		<p>Is it not the case that the Contractor will produce the Commissioning Programme for review by Project Co?</p> <p>This will be discussed with the Trust.</p>	

Comment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
24.	23.5		60 Business Days after the Commissioning End Date for the provision of the operating manuals and Health and Safety records is too long as Project Agreement requires these to be delivered with effect from the Commissioning End Date. To be considered at PA level.	
25.	35 (Payment)		TA will need to review in due course Schedule 18 dealing with the amounts. As per the Project Agreement commentary, funders will need to understand the timing and amounts of payments due to the Building Contractor and how this interfaces with the amounts due from the Trust as capital contributions. The Contractor will presumably not want to have completed too much work before a right to suspend occurs in the event that the Trust capital contribution is not being paid and Funders have a draw stop.	
26.	36 (Insurance)		IA to review Contractor insurances.	
27.	36.3A		The Contractor should only be relieved from any liability to the extent that the Contractor would have been entitled to claim under the insurance cover (had it been taken out) in respect of that particular liability.	
28.	36.8		The Contractor is not able to make claims directly against the Trust, therefore the clause should be amended.	
29.	36.14.1		The clause should be amended to be an acknowledgement by the Contractor that the Trust may terminate.	

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30.	36.14.2		Reference to the Agreement in line 2 should be a reference to the Project Agreement.	
31.	36.21		Is it intended that the Contractor will have an insurance risk manager?	
32.	36.25(c)		It will be the Trust and not Project Co that determines whether reinstatement will occur and whether or not a variation enquiry will be made which will be stepped down to the Contractor. Drafting may be amended.	
33.	36.25C(c)(vi)		Payment to the Contractor by Project Co from the Insurance Proceeds Account will need to be agreed. This will not be automatic as the drafting suggests.	
34.	36		<p>A statement could be included that subject to the provisions of clause 8, the Contractor should bear the risk of loss and damage however caused (save where the loss and damage is caused by any breach of contract by or negligent acts or omissions of Project Co and Project Co parties or the Trust and Trust Parties) to the works and all goods, materials and construction equipment whether or not incorporated in the Works. The same should apply to any snagging or remedial works.</p> <p>There should also be an obligation in the event of loss or damage to the works save where 36.25C applies to proceed diligently to reinstate the loss and damage. Query if this is to be dealt with in the Rectification Plan.</p> <p>There should be a statement that the Contractor is deemed</p>	

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			to have satisfied itself to the extent of the cover that is being provided and that Project Co will not be liable for procuring cover in amounts greater or upon terms more favourable than those referred to in clause 36.3.	
35.	39 (Change in Law)		<p>The Work should be compliant following any Change in Law occurring before the later of the Completion Date and the Actual Completion Date such that the Works are performed in accordance with the laws applicable at the date of the performance and in accordance with the law coming into force before the certificate of practical completion has been issued but with a contractor having the benefit of any transitional time periods.</p> <p>Clause 39.1 to be clarified.</p>	
36.	41.1		The Contractor will only be entitled to an extension of time for a Compensation Event or a Project Co Delay Event.	
37.	41.3		Drafting to be amended in schedule 22 to be reviewed. A Trust Works Variation is not responded to directly by the Contractor and query whether the schedule 22 referred to is in the PA of the construction subcontract. The same applies to 41.3.2.	
38.	41.3.4		The dispute resolution procedure should be that of the Project Agreement.	
39.	41.7		A revised Completion Date (subject to Project Co delay events) would be fixed under the Project Agreement.	

Comment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
40.	41.9		Schedule 26 (Dispute Resolution Procedure) will need to be clear that for Delay Events under the Project Agreement (and subject to the fact that there is no extension of time unless it is a Compensation Event or Project Co Delay Event) that this will be governed by what is agreed at Project level, i.e. the provisions of clause 1.2(B) need to be amended to deal with this. See above.	
41.	42 (Relief Events)		Relief Events have been referred to in clause 41 but also dealt with separately under this clause. As above, Relief Events should only give relief from termination. Clause 42.2.2(I) to be deleted.	
42.	43 (Force Majeure) 43.2.5		Termination will only occur if the termination arises under the Project Agreement. There should be no separate right for the Contractor to terminate the Construction Contract. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
43.	43.3		There are references to Deduction which should not appear in the Construction Contract.	
44.	44 (Contractor Event of Default) 44.1.1		(a) and (b) are duplicates.	

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45.	44.1.2(A)		TA has commented that timing of receipt of Final Recovery Plan and ability to achieve actual Completion Date by Completion Long Stop Date is acceptable.	
46.	44.1.3		The references to Services at the Hospital for which the parties are not responsible should refer to Project Co not the Contractor.	
47.	44.1.4		<p>There could be an Event for Default for failing to proceed regularly and diligently with the performance of the obligations under the Contract or for permitting a material breach of the contract or series of breaches having a material effect.</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p>	
48.	44.1.13 and 44.1.15		See above in relation to caps on liability. Project Co will not be forced to extend the cap. The cross reference in 44.1.14 should be to clause 9.6 (caps on liability). In addition, there is no mechanism to increase the cap for the purpose of 44.1.14 as the cap increase is only in respect of liquidated damages albeit that this increases the overall cap.	
49.	44.1.16		Reference should be to the Bond becoming invalid, unenforceable. Provisions will need to reflect the security package agreed.	
50.	44(B)		This should be redrafted an acknowledgment of the Trust right to terminate. The same applies to 44(C).	

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51.	45 (Project Co Events of Default) 45.1.5		Should be deleted. There should be no termination right for failure to take out the insurance. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
52.	46.1 (Voluntary Termination)		Level of compensation to be agreed.	
53.	48 (Compensation on Termination)		Circumstances of Project Co Default under the Project Agreement. Voluntary Termination - the amount to be received by the Contractor should equate to the total value of the Work properly executed and any design work carried out. We understand a similar provision has been accepted on other closed transactions by EIB and other funders. Definition of Contractor losses to be reviewed.	
54.	50.4		Project Co should have the ability to assign, transfer or dispose of the benefit of the Contract to the Funders (not just under the Direct Agreement). Drafting to be amended as agreed.	

Midland Metropolitan Project

Services Agreement Commentary

Hard FM Agreement Version ITPD Stage 2/3 Interim Submission [02.04.15]

The Hospital Company (Sandwell) Limited ("Project Co")

Carillion (AMBS) Limited ("Service Provider")

Rows highlighted red. Ashurst consider will not be acceptable to a funder. We expect all red issues to be cleared before end of dialogue.

Rows highlighted amber are comments which may be acceptable to certain funders but Ashurst will have to report on these issues.

Rows highlighted green. These have been agreed by the Trust.

Rows highlighted blue are comments referred to the shadow funders' due diligence Technical Adviser.

Rows highlighted purple are comments referred to the shadow funders' Insurance Adviser.

Where issues (i) have been revised and the Service Providers agreed to drafting changes or (ii) where the item is clarificatory only, the row is coloured white.

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
1.	4A.3, 5.9 and schedule 39 (Project Documents)		To comment on schedule 39 (when available) to confirm that obligations extracted from Funding Agreements are complete in relation to those to be performed by the Service Provider.	
2.	5.4		Delete obligation on Project Co to act in good faith. We understand a similar provision has been accepted on	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
	(Co-operation)		other closed transactions by EIB and other funders.	
3.	5.8 (Interface Issues)		Interface Agreement to be reviewed.	
4.	7.1A.2		Funder to confirm whether Project Co should have any control over subcontracting. Service Provider regards this as unnecessary.	
5.	7.2.5 and 7.2A (Trust Title Warranty)		This undertaking by Project Co to be reviewed once outcome of title discussions are finalised. The Service Provider should undertake not to put Project Co in breach of any title matters to which Project Co is subject under the PA and is amenable to providing this in respect of its occupation.	
6.	7.3 and 7.4 (Tax Compliance (old drafting) and Warranties and Undertakings (new drafting))		Warranties and undertakings to be given by the Service Provider only.	
7.	9.1 (Limits on Liability)		To acknowledge right to recover losses Project Co suffers as a result of claim from other subcontractors, rights to make Deductions, losses relating to Funding Agreements.	
8.	9.3		Delete.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
	(Sole Remedy)		We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
9.	9.6 – 9.10 (Liability Caps)		<p>TA commented on annual and aggregate liability of Service Provider in clause 9.8 and 44.1.19 as being acceptable.</p> <p>Liability to Construction Contractor under Interface Agreement to be outside any cap.</p> <p>.</p> <p>Indemnities to be outside any cap. See clause 9.10(e)</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p>	
10.	9.7A (Liability Caps)		<p>TA does not accept the Service Provider's request for a monthly cap with a carry forward of any excess deductions over that monthly cap.</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p>	
11.	9.9 (Liability Caps)		<p>Funders to comment on liability for wilful default being capped at 10 x annual service payment.</p> <p>Liability for wilful default should be uncapped.</p> <p>See also comment on compensation on termination for a Prohibited Act at clause 48.5 below.</p>	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
			We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
12.	9.10 (Liability Caps)		<p>To be excluded from liability caps:</p> <p>(a) all indemnities given by Service Provider under this Agreement (not just those in clause 8) e.g. IP (NB. TUPE and clause 8 indemnities are covered).</p> <p>(b) any liability arising under Related Agreement Claims (clause 1.2)</p> <p>(c) any sum due from the Service Provider in respect of interest due from the Service Provider and costs of enforcement of claims against Service Provider by Project Co</p> <p>(d) any liabilities of the Service Provider pursuant to the terms of the Interface Agreement</p> <p>See comment on clause 19 below.</p> <p>We understand a similar provision has been accepted on other closed transactions by EIB and other funders.</p>	
13.	15.1A (Service Provider Sublease)		Update drafting to include reference to the Lease.	
14.	17.7 (Service Provider)		Enforcement of rights should be dealt within the Interface Agreement.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
	Design Approval)			
15.	21 (Equipment)		To be reviewed when schedules available.	
16.	22 (Commissioning)		Provision to be inserted requiring Service Provider not to impede the Works whilst it is carrying out any pre-completion commissioning and to be responsible for any delay/damage caused whilst doing so or include in Interface Agreement.	
17.	22.18 (As Built Specification)		Any deductions/service failure points suffered by Service Provider should be recovered from Construction Contractor through Interface Agreement. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
18.	22.18A (As Built Specification)		To discuss with funders. Liability should be limited to any impact after the twelfth anniversary. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
19.	28.4 (Maintenance)		Schedule of Programmed Maintenance to be provided earlier than Project Agreement timing to allow review.	
20.	28.6 (Maintenance)		TA to confirm additional 5 Business Days is sufficient buffer.	
21.	28.15, 28.17 and 28.18		TA comment. Painshare/Gainshare for over/underspend. It is	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
	Lifecycle		not entirely clear how the risk/reward notice works	
22.	28.23 (Lifecycle)		To discuss with funders the termination provisions. TA comment on potential impact on Services delivery if Lifecycle and Hard FM services are performed by different contractors. This happens on other projects where Project Co is entitled to appoint a third party	
23.	28.24A and 28.25 (Lifecycle)		TA comment on termination thresholds. Further clarity required on how the risk/reward notice works	
24.	29.5 (Warning Notices)		TA to comment should number of Working Notices in a 6 month period be 2 not 3?	
25.	31 (Pension Matters)		To consider when revised PA drafting available.	
26.	36.2A and schedule 21 (Service Provider Insurances)		IA to review Service Provider insurances.	
27.	36.7A and 36.8 (Service Provider Insurances)		IA to review sizing of Delay in start-up and policy to see if this is appropriate.	
28.	36.8(b) (Service Provider Insurances)		Drafting to be deleted from 36.8(b) to be amended to deal with position as between Project Co and the Service Provider.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
29.	38 (Information and Audit Access)		To consider responsibility for PA Schedule 25 record keeping provisions.	
30.	43.2.5 and 43.2.7 (Force Majeure)		Right to terminate should be for Project Co only. Termination of the PA should result in automatic termination of the Subcontract. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
31.	44.1 (Service Provider Events of Default)		Additional termination provisions should include: (a) PCG becomes "invalid, void or ceases to exist"; (b) termination of the PA as a result of a breach or default by the Service Provider. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
32.	44.1.14 (Service Failure Points)		TA to comment on calibration of service failure points.	
33.	44.1.19 (Aggregate Liability)		TA accept aggregate liability and right to refresh arises. Funders are likely to expect a limit on the number of times the cap is refreshed	
34.	44.1.21 (Breach of Warranty)		This is a duplicate of 44.1.7.	

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
35.	45 (Project Co Events of Default)	Delete 45.1.3 – 45.1.5	TA commented on non-payment threshold – should be twice the monthly payment due. 45.1.3 and 45.1.4.	
36.	46.2.5 (Trust Break Point Date Compensation)		Review of the quantum to be paid by Project Co to Service Provider will be required. TA suggests 1 month fee.	
37.	48.1 (Compensation on Service Provider Default)		TA to comment on quantum and heads of loss of "the Termination Losses" payable to Project Co. (See definition in schedule 1.) Limb (b) to include additional costs. This will need to be expanded where termination of the PA also occurs.	
38.	48.5A(b) (Compensation on Termination)		If the Service Provider has caused the Project Agreement to terminate then the Funders would expect Project Co to recover the Senior Debt Amount (schedule 23 part A) from the Service Provider subject to the Service Provider's liability cap, notwithstanding that the Trust may only pay compensation pursuant to part B. Other losses should also be covered. We understand a similar provision has been accepted on other closed transactions by EIB and other funders.	
	Schedule 1 (Definitions)			

Com ment No	Document, Clause, Schedule Headings and/or clause/ paragraph ref	Proposed amendment	Justification for amendment	Trust comment
39.	"Adjusted Estimated Fair Value of the Agreement"		Is this definition relevant to the sub-contract? Schedule 23 to be reviewed.	
40.	"Deemed New Agreement" and Post Termination Services Amount"		Query if these definitions are relevant	
41.	"Lifecycle"		TA commented that £500 threshold thought to be low.	
42.	"Related Agreement Event"		To be discussed with Funders.	



MIDLAND METROPOLITAN HOSPITAL PF2 PROJECT

[DRAFT] INTERIM (STAGE 2) INSURANCE REPORT FOR FUNDERS

24th June 2015

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INTRODUCTION

PURPOSE OF THIS REPORT

Willis Limited (Project Finance Team) [is appointed¹] by Sandwell and West Birmingham Hospitals NHS Trust, (the "First Trustee") to act as Insurance Due Diligence Advisor to the prospective Funders for the Midland Metropolitan Hospital Project (the "Project") which is being procured by the First Trustee under the UK Government's PF2 project financing initiative.

Following the formal selection of a Preferred Bidder for the Project, the appointment of Willis Limited will be novated by the First Trustee to the Project's Preferred Bidder and the Funder(s) will upon its(their) appointment take a further and final novation of this appointment.

This is an interim [draft] **Stage 2** report for the funders that follows on from our Stage 1A report issued in April 2015. All in accordance with Sections 1 and 2 of Schedule 1 (the Insurance Services Advice Requirement) and as repeated and updated herein at **Appendix A**.

Contract award is anticipated for the [15th December 2015]². The concession period is 30 years.

LEGAL ISSUES AND HOUSEKEEPING

This report is issued in our capacity as insurance advisers to the Funders. No-one may or should rely upon the content of this report unless we have expressly agreed in writing that they may do so, whether in our appointment letter or otherwise.

This report is copied (for information only) to the Trust and its advisers.

Our review of the Borrower's insurances³ is based upon the [cover notes] [certificates] [draft policy wordings] provided to us. Our comments on the cover provided by the insurance programme are always subject to the policy terms, conditions and limits. When the insurance policies are issued, it is suggested that these are also reviewed against the requirements of the [Facility Agreement] [loan documentation], to ensure full compliance.

The conclusions contained herein are based upon information provided to Willis.

This report should not be relied upon as legal opinion. Comments made on legal issues should be checked with the Funder's legal adviser. We have not reviewed any pension or other employee benefit related insurance arrangements.

Willis Limited cannot guarantee the solvency or future claims paying ability of any insurer or underwriter.

Ungrammatical use of capital letters follows those terms used in the project documents.

The use of the term "Funders" refers to [*parties to be appointed*].

The "Project" means the design, construction, operation, maintenance and finance of an Acute General Hospital at a site in Sandwell, Birmingham, UK. The postal address of the Project site is Grove Street, Sandwell, Birmingham, B66 2QS.

"Project Co" will be [The Hospital Company (Sandwell) Limited]. The "Building Contractor or Construction Contractor" will be [Carillion Construction Limited]. The FM Contractor (Services Contractor) will be [Carillion Services Limited].

In respect of work carried out by us, we shall be liable in contract but not in tort in respect of any loss, damage, costs or expense (reasonably incurred) directly arising from our breach of duty provided however that our liability to the Funders shall be limited to [£1 million] in the aggregate. We shall not be liable for any consequential loss. We shall owe no other liability in connection with our services except in accordance with these terms. Nothing in these conditions shall, or shall be construed as, excluding or limiting our liability for any death or personal injury caused by our negligence or for fraud.

This report is valid only if signed and dated by representatives of Willis Project Finance.

.....
24th June 2015

¹ Willis' appointment letter is not yet signed, but terms are now finalised.

² We understand this might be brought forward to 9th December 2015.

³ Initial summary only – no coverage is in force, and is not anticipated to be placed until nearer the date of Financial Close.

EXECUTIVE SUMMARY

PROJECT RISKS AND INSURABILITY

This is set out in detail herein. Other than: Environmental Impairment Liability (EIL) exposures (from the site's earlier uses) and the possible additional Construction/Works phase hazard of impingement upon inland waterway Infrastructure (through nuisance, damage, etc.) we are unaware of any particular project hazards that will impact upon the insurability.

We have a number of issues to discuss with the Lenders' Technical Adviser, regarding the appropriateness of the Sums Insured, and Indemnity periods, etc.

INSURANCE PROGRAMME SUMMARY

We have not received any detailed insurance proposals (including markets, etc.) at this stage from the Borrower's broker, which is as we would expect.

The Project is highly likely to follow the stipulated requirements in the PF2 Insurance Guidance, and gives us confidence that it will be appropriate to the risks presented.

Both the Sponsor and their Broker (Aon) are well-versed in arranging insurance for a Project such as this.

REVIEW OF PROJECT DOCUMENTATION

We have reviewed the current [draft] Project Agreement (which is based upon the PF2 Health Sector Standard Form. We await sight of the Credit Facility Agreement to review, as well as the Stage 2 Funders' Technical Adviser's draft Report.

The Funders Legal Advisers' comments upon the documentation have been commented upon in a separate document.

MARKET SECURITY

The following insurers will be utilised for the construction phase insurances (together with their S&P rating):

- *[To be advised in due course]*

Please note that Willis cannot guarantee the solvency of any insurer or underwriter. These Insurers represent acceptable security to Willis at this date. Willis Market Security reports on these insurers available on request.

As part of our review on behalf of Funders of the financial strength of insurers and or reinsurers, this Report does or may contain reference to financial strength ratings provided to us by Standard & Poor's ('S&P').

Please note that Standard & Poor's requires Willis (together with all other S&P licence holders) to include S&P's own disclaimer on every report issued by us which contains such reference.

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INSURANCE PROGRAMME SUMMARY

In accordance with the requirements of the Project Agreement [and in turn, the Credit Facility Agreement] the insurances to be arranged will need to provide cover on the following basis:

- With effect from the date of the Project Agreement, in respect of the construction of the new hospital and up to the Practical Completion Date:
 - A Construction “All Risks” policy will provide cover for physical loss or damage to the works.
 - A Delay in Start Up (“DSU”) alternatively known as an Advanced Loss of Profits (“ALoP”) insurance policy will be arranged to cover any loss of revenue resulting from a delay in the commencement of services following insured loss or damage.
 - Third Party Liability insurance to cover any legal liability the project may have to compensate third parties in respect of bodily injury or property damage caused by the Project.
- With effect from the date of the commencement of the Services at the Facility, i.e. after the period of Project Co testing and commissioning, but on the date that the Trust takes possession for their own commissioning:
 - A Property Damage “All Risks” policy will provide cover for physical loss or damage to the project assets;
 - A Business Interruption insurance policy will be arranged to cover any loss of revenue resulting from an interruption to the Facilities’ operations following insured loss or damage.
 - Third Party Liability insurance to cover any legal liability the project may have to compensate third parties in respect of bodily injury or property damage caused by the Operational services of the Project.
- In respect of legal requirements:
 - Employers Liability insurance
 - Motor Liability insurance
 - Both only where required due to the presence of a risk exposure. This obligation will normally be passed down to the relevant sub-contractors during both the Construction and Operational Phases.

The insurances set out above are, in our view, appropriate for an acute hospital project of this type and size. For the purposes of this report we have reviewed the [proposal forms] for Construction “All Risks” (including delay in Start Up and third Party Liability) which it is proposed will be arranged with effect from the Project Agreement date of signature.

The remaining insurances will be arranged with effect from the Operational Commencement Date. The evidence of these insurances will need to be reviewed when they are arranged. As a consequence, the insurance requirements set out in Schedule [] to the Credit Facility Agreement will be drafted to ensure that the ProjectCo/Borrower will be obliged to arrange the insurances on the basis set out above (in the Project Agreement).

Sums Insured

The current insurance proposals as set out in the Proposal Form and related documents are intended to provide cover for the following sums insured:

Construction “All Risks” Insurance:

In respect of the construction of the new hospital – [£285,000,000] [Plus L1 equipment plus IM&T Equipment].

We understand that the current values are:

New Build Works: £289,300,000.00 (Verified by LTA report? [●])

[NB. The Carillion Information supplied suggests that the Total Construction Costs (including on-costs) will be £286,944,787. This is likely to float during the period pre-Preferred Bidder.]

L1 Equipment: £750,000.00 (Verified by LTA report? [●])

IM&T System: £2,200,000.00

(Verified by LTA report? [●])

Construction Underwriting Information (Comments)

2.20.3 Value of Trust supplied plant is [£3,056,938].

We are advised that this is not plant but is an estimate at a point in time of the medical equipment to be procured over and above the Trust's current assets. The total value of trust equipment to be transferred to or installed in MMH is c £55m. This figure will be finalised prior to coverage incepting.

2.28 — If Carillion proceed with the IM&T system, a further £3M will need to be added to the sum insured.

We are advised that this is now £2,200,000 and is already included in the £289m new build works total. This is the active network equipment – included in the scheme.

[As indicated above, we propose to confirm that the sums insured (when proposed) are in accordance with the Funders' Technical Adviser's expectations, in order to confirm that this figure is an appropriate level for an acute hospital of this type, size and scope.]

Delay in Start Up

The sum insured [proposed] for the Delay in Start Up insurance based on a 39 month indemnity period is [£71.5m]. This equates to an approximate per annum sum of [£22m, incl. £2.85m annual revenue]. 39 months is broken down as: construction period 33 months, plus 6 months testing, contingency etc.

[We will discuss this figure with both the Funders technical Adviser and their Financial Model adviser, in order to confirm that this figure is an appropriate level for an acute hospital of this type, size and scope.]

Third Party Liability Insurance

The policy will provide a minimum limit of indemnity of [£75,000,000] any one occurrence, unlimited number of occurrences, but [£75,000,000] in separate annual aggregate for pollution & contamination and products liability

This level of cover is within the normal range of limit we would expect to see for a project of this size and type.

Outline Method Statement (Comments)

Groundwork's [sic]. There is mention of constructing a retaining structure utilising a contiguous piled wall. This is not mentioned in the construction proposal form, but may be mentioned in an attachment thereto. If not so mentioned, it should be disclosed to potential insurers.

Follow up (Sponsors') advice: This is covered off under question 2.6 of the construction proposal form by virtue of the attachment.

Structure / Frame It is intended that six tower cranes be used. Will over-sailing rights from adjacent third party property owners/occupiers be required? If so, has any start been made in obtaining these?

Follow up (Sponsors') advice: We confirm that the proposed six tower crane solution will not require over-sailing rights.

Environmental Impairment Liability Insurance

We are not aware [yet] of any additional coverage being taken out by any of the Trust, the ProjectCo/Borrower or the Building Contractor with regard to the risk of gradual pollution leading to a third party liability in the Construction or Operational Phases of the project.

Construction Underwriting Information (Comments)

2.9 The ground is contaminated with Arsenic, lead, PAHs, Sulphate, cadmium, which will be remediated by the client prior to hand over to Carillion at financial close.

Mention is made of novation in document 103. We would like clarity as to what this is referring.

Follow up (Sponsors') advice: assume that this relates to the benefit of the warranties being novated to Project Co.

Warranties on surveys

Willis will discuss this with the Lenders Legal Advisers for confirmation of the position.

2.14 Possibility of asbestos removal by contractors appointed by Carillion. *[Cannot determine likelihood at this point.]*

[The EIL risk has been reviewed by the Technical Adviser, and is considered a low one. The Sponsor believes that due to the nature of the project and the remedial work being undertaken by the Trust, a separate insurance is not required.

This position is not unreasonable at this stage and in common with many UK PPP/PFI type projects.]

AON Operational General Questionnaire

Willis Review comment:

The Asset Schedule omits C1, C2, D1, D2, E1, E2, F1, F2 and L2 Equipment, which was included in the construction period proposal form at a value of [£2,306,938]⁴. The reason for the omission is not clear.

Follow up (Sponsors') advice: This requires cross-referencing with the responsibility matrix within Schedule 13. ProjectCo, in respect of these items, are only required to either procure/install/commission, therefore, we have provided an allowance under the construction insurances. In respect L1, A1 and A2 (A1 and A2 values included in the main ECV) equipment these are the only items ProjectCo are required to maintain/lifecycle during the operational period.

Under Breakdown Insurance there is no mention of lifts. Given the wards are at high level, Willis would query if a breakdown may result in reduction of project revenue?

Follow up (Sponsors') advice: The current drafting of Schedule 18 anticipates deductions for the unavailability of lifts. Generally 5% of the Services Payment for each lift with banks of lifts or groups of critical lifts carrying higher weighting. This table in Sch. 18 needs to be updated to reflect Project Co's proposed design.

Under Business Interruption the maximum indemnity period is estimated at 39 months, giving a sum insured of £71.5M.

(Now confirmed.)

⁴ This value is to be refreshed.

OVERVIEW OF MAIN PROJECT RISKS AND INSURABILITY

This Section overviews the significant insurance related risks to which a project of this type may be exposed. It identifies some areas of specific interest for the Project and Funders.

On the basis of our review of the Project Agreement documentation and the insurance related correspondence and documentation provided to us, we have suggested suitable insurance requirements to be included in the Credit Facility Agreement which, in our view, will provide an appropriate scope and level of cover for the Project.

Funders' primary concerns with regard to insurance coverage for the Project fall into three principle categories, as follows:-

- Property:** Loss or damage to the Project assets, in which they will have an insurable interest.
- Revenue:** Interruption to the Project revenue stream, which may affect the servicing of the debt, and
- Legal Liability:** The Project participants, especially the ProjectCo/Borrower, incurring a legal liability to pay damages to third parties, including Environmental Liability and clean-up costs. Liability for clinical negligence is not born by the ProjectCo, and remains with the NHS Trust.

These are analysed in more detail below.

(1) Construction Phase

Material Damage and Loss of Revenue

Fire and explosion

Fire and explosion on construction sites where hot work, incomplete structures and inactive fire protection systems are common, may cause significant damage and delay to the progress of the works.

Towards the end of the construction phase, damage to high value electrical and ICT equipment (including specialist medical equipment) that is particularly sensitive to smoke and water ingress could be a major exposure.

Resultant delay to the commencement of operations and consequential revenue losses will be of significant concern to Funders.

These risks, and resultant loss of anticipated revenue should there be a consequent delay in completion, are to be insured by the Project Insurances, subject to the appropriate deductible/excess.

Follow up (Sponsors') advice: Noted – we do not envisage this being a problem and will be covered under the construction insurances.

Theft, malicious damage, accidental damage

Loss of property to be incorporated into construction works and damage to works from the above causes are relatively common.

These risks, and resultant loss of anticipated revenue should there be a consequent delay in completion, are to be insured by the Project Insurances, subject to the appropriate deductible/excess.

Follow up (Sponsors') advice: Noted – we do not envisage this being a problem and will be covered under the construction insurances.

Terrorism

Whilst the Project does not present any particular Terrorism hazard, it is customary for UK PF2 projects to take out and maintain this coverage in accordance with the PF2 Guidance. Coverage is available in the UK market at the present time.

These risks, and resultant loss of anticipated revenue should there be a consequent delay in completion, are to be insured by the Project Insurances, subject to the appropriate deductible/excess.

Follow up (Sponsors') advice: Noted – we do not envisage this being a problem and will be covered under the construction insurances.

Defective Design, Workmanship and Materials

The widest available cover for this risk area (that is, the least prohibitive exclusion) is the “LEG3/06” clause. This maintains material damage cover in respect of the costs necessary to replace or rectify any of the property being insured which is defective in design, plan, specification materials or workmanship (that means the defective part is covered) but not the additional work resulting from and including improvement to the original design, plan, specification materials or workmanship.

We will propose that Funders require LEG3/06 as the basis of the cover and to be compliant with the Project Agreement the deductible is to be a minimum of £150,000 each occurrence, which is market.

Follow up (Sponsors’) advice: OK and noted. This is stated in the exclusions of Schedule 21, Part 1, clause 1.8.8

Key Equipment

Loss or damage at the premises of a supplier could prevent delivery of key items with consequent rescheduling and delay. We would expect at this stage of the procurement that not all supply chain elements are as yet agreed so this may require further development with regard to any key or critical items.

The Loss of Anticipated Revenue (or DSU) insurance should be extended to provide cover for delay caused by damage at nominated suppliers’ premises; this will have a sub-limit of [£2,500,000⁵] and will be limited to ‘FLEXA’ perils.

Follow up (Sponsors’) advice: Noted – we do not envisage this being a problem and will be covered under the construction insurances.

Utility supply failure

An accidental failure of the utilities could result in a delayed start up and loss of anticipated revenue. The risk is insurable insofar as the failure results from physical loss of or damage to the property of the utility supplier.

The Loss of Anticipated Revenue insurance should be extended to provide cover for delay caused by the damage to public utility supplies; this will have a sub-limit of [£2,500,000⁶] and will also be limited to ‘FLEXA’ perils.

Willis will draft the Loan Agreement insurance provisions accordingly.

Denial of Access

A delay to commencement of operation could be caused by denial of access to site as a result of damage to surrounding property.

The cover will be subject to a sub-limit of [£5,000,000⁷].

Follow up (Sponsors’) advice: Noted – we do not envisage this being a problem and will be covered under the construction insurances.

Unforeseen Ground Conditions

This project has a suggestion that there may be possible problems with the Site ground conditions. Funders should satisfy themselves that any remedial measures taken by the Trust and/or Contractor have sufficiently mitigated any residual risk. *[We will discuss this matter with the Funders Technical Adviser and establish that they are confident that the technical solution will provide the required resilience going forward.]*

Insurance will not be available for unforeseen ground conditions.

Adverse Weather

Material damage arising from weather perils is insured by the Construction “All Risks” policy together with ensuing loss of potential revenue. There is no requirement that insurance protection is purchased in respect of delay caused by adverse weather where no material damage has occurred

Although cover is sometimes available under general delay insurance, it is expensive and rarely effected.

We would not expect the Project to be insured for such risks, even if available.

⁵ To be confirmed when Evidence of Coverage is received.

⁶ Ditto.

⁷ Ditto.

Archaeological Finds

This could result in a delay in completion and consequential loss of revenue. As it does not involve damage to the Works, it would not trigger the Delay in Start Up insurance.

Insurance may be available but it is not required. This is in line with our expectations as such cover is not commonly purchased.

Strikes

In the event of material damage to insured property caused by striking workers, that was not otherwise classed as “Criminal Damage” for the purposes of the Project Agreement, the insurance programme will respond for both the damage and any resultant loss of revenue. In the absence of any material damage, insurance protection is not required by the Project Agreement.

Although cover may be available under general delay insurance, it is expensive and rarely effected. We would not expect the Project to be insured for such risks.

Legacy Estate and Latent Defects Exposures

It is not uncommon in PPP/PFI projects (and is seen quite often in UK Healthcare sector projects) for a Project to take on the liabilities and responsibilities associated with legacy estate buildings and other assets. There is a risk of latent defects in the legacy estate that the Project Co may not be in a position to fully due diligence or make long term provision for, where there is no insurance solution available as risk transfer.

As far as we are aware there is no legacy estate transfer in this project.

(Latent defects insurance coverage is rarely purchased in PF2, and cover is generally restricted to the new build facilities that the Construction Contractor has direct involvement in. Insurers will expect to be closely involved in the works inspection process throughout construction.)

Legal Liability

Third Party injury and damage

The ProjectCo is required to effect Public/Third Party Liability (TPL) insurance, covering all interested parties, with a limit of indemnity of not less than [£75 million] any one occurrence.

In view of the size and scope of this project, we suggest that this is appropriate, and certainly typical of a large Acute General hospital.

The site is adjacent to a canal, and some construction works are likely to be carried out close to the canal retaining wall. We would expect the TPL insurance coverage to acknowledge this fact and not exclude liabilities arising from damage to or interference with the use of the canal.

Follow up (Sponsors') advice: ProjectCo has provided details on the works to the canal which has been passed onto the TPL insurers – they have not provided any indication that this is a problem. When we come to place the insurances we will make sure this is raised separately as a 'catch all'.

Liability to Employees

The Borrower is required to effect and maintain insurances required by law. If the borrower has no employees, it is unlikely to have any requirement to arrange any statutory insurance (Employers Liability & Motor Third Party Liability).

[The position with regard to Directors of the ProjectCo and the shareholding of the Project Sponsors will need to be clarified in due course. This is not an issue that we anticipate will be of concern to Funders.]

Professional Liabilities

No mention is made in either the Project Agreement (clauses) nor the Collateral Agreement Schedule, and the Insurance Schedule, regarding Professional Indemnity insurance in respect of the “Professional liabilities” e.g. negligent or erroneous design, inadequate soil investigation, site clean-up or inadequate supervision, etc. that may be incurred by (primarily) the Building Contractor. We would expect such liabilities to be insured by the Building Contractor.

This is in accordance with what we would expect to see for a UK Health sector PFI project that is following Standard Form wording.

Environmental Liability

The Public/Third Party Liability covers liability arising from sudden and accidental events only, and is in line with general market practice. Any existing or gradual pollution liability is not insured.

Please see our comments in the [document review section] regarding Environmental Liability exposures.

(2) Operational Phase

Physical Damage and Consequent Interruption

The main risks are damage or loss to physical assets with a consequential loss of revenue. With some exceptions, all such risks will be insured under the proposed operational phase Material Damage “All Risks” and Business Interruption insurance policies. Standard Insurance **market exceptions** include:

- War and radioactive contamination;

The UK insurance market has standard exclusions which equate to those in the Force Majeure definition in the Project Agreement.

- Wear and Tear, Gradual Deterioration, Faulty Design Workmanship or Materials, Latent or Inherent Defects;

These are standard exclusions in property insurance policies but not with respect to resulting or consequent damage, nor (other than wear and tear and gradual deterioration) for mechanical or electrical breakdown.

- Unexplained inventory losses;

This is a standard exclusion which prevents an insured from claiming for pilfering type losses.

- Consequential financial losses (loss of revenue, loss of use, etc.)

The risk of loss of revenue will be insured under the proposed Business Interruption insurance policy.

Other exceptions: it would also be expected that the Operational Material Damage “All Risks” policy will exclude cover for:

- Deliberate acts (sanctioned by senior management)
- Frost, and change in water table level, but not resulting or consequent damage
- Contamination, but not if resulting from fire and explosion
- Normal settlement of new structures
- Damage to moveable property in the open due to certain defined perils e.g. wind, rain, theft
- Theft of precious metals, jewellery, works of art property in transit, money
- Operational error or omission, corrosion, rust, change in temperature, dampness, dryness, wet or dry rot, shrinkage, evaporation, loss of weight, change in colour, flavour or texture or finish, vermin, insects, marring or scratching
- Deliberate act of supply authority in withholding the supply of water, gas, electricity or fuel
- Acts of fraud or dishonesty
- Collapse or cracking of buildings unless the damage to the building results from a defined peril (which term includes subsidence and landslip) and is not otherwise excluded, and
- Damage to property undergoing any process.
- Interruption not involving Physical Damage

The Project may also be disrupted by events not involving actual physical loss or damage to the Project assets being insured, for example:

- Accidental failure of utilities – this will be insured and is a PA requirement.
- Outbreak of infectious disease, MRSA etc. The PA does not require this to be insured, but we understand that the policy that Aon will be placing will include such coverage. *Willis will include a requirement for the coverage in the financing documentation.*

Follow up (Sponsors') advice: This is outlined under the Business Section of the current insurance schedule – clause 3.7.6.

It is possible for the Project to be interrupted by other causes (such as strikes, deliberate cutting of the power or water supplies by the appropriate authority); these will not be insured, because it is not usual for insurance to be available.

Legal Liabilities

Third Party injury and damage

The Project Agreement Insurance Schedule requires the Borrower's legal liability for accidental injury to persons and accidental damage to property to be insured for a limit of [£75 million] any one occurrence.

This limit of indemnity is in line with that which we would expect for a project of this nature.

As stated above, the site is adjacent to a canal. We would expect the TPL insurance coverage to acknowledge this fact and not exclude liabilities arising from damage to or interference with the use of the canal. We are not aware of any additional property owner liabilities or other legal obligations that may arise out of the proximity with the canal (e.g. mooring rights and mooring arrangements, etc.)(This may be discussed with the Funders' Technical Adviser in due course.)

Liability to Employees

The Borrower is required to effect insurances required by law. If the borrower has no employees, it is unlikely to have any requirement to arrange any statutory insurance (Employers Liability & Motor Third Party Liability).

There will usually be a pass down of the obligation to insure statutory insurances from Project Co to its operational sub-contractor – who has the employees that require the coverage.

[The position with regard to Directors of the ProjectCo and the shareholding of the Project Sponsors will need to be clarified in due course. This is not an issue that we anticipate will be of concern to Funders.]

Environmental Liability

The Borrower's third party liability insurance will cover liability arising from sudden and accidental events only, and this is in line with general market practice. Any existing or gradual pollution liability is not insured.

Please see our comments in the [documentation reviews section] regarding Environmental Liability exposures.

Force Majeure

The insurance coverage will address certain elements of the Force Majeure provisions as set out in the PF2 Project Agreement in relation specifically to Terrorism – this is as per usual with similar UK projects.

There are exclusions in the insurance coverage for War, Civil War, etc., nuclear contamination and sonic boom, all of which are standard in the market at present.

PROJECT AGREEMENT

We have reviewed the insurance clauses and insurance schedule in the draft Project Agreement:

[Version: *version reference 23371255.24\gh01*].

Willis has also been provided with copies of the Shadow Funders' Legal Advisers comments upon the Project Agreement, Construction Contract and Services Agreements.

Indemnities and Liabilities Clauses

The Sponsor has commented upon the PA Clauses 8.1.1 and 8.2.1 with a few minor wording corrections.

(The alterations proposed are appropriate.)

Insurance Clauses

The Insurance requirements are set out in Clause 36. They follow the PF2 Standard Form.

(The requirements are as we would expect.)

The Sponsor has commented upon the PA Clauses 36.4.2 and 36.8 with a few minor wording alterations.

(The alterations proposed are appropriate.)

Insurance Schedule 21 (Insurance Provisions)

Parts 1 & 2 (Insurance Requirements in Construction period & Operational Term)

(1) Construction period

Contractor's "All Risks"

The requirements are not unusual. *The Defects Liability Period is shown as 12 months.*

Guarantee maintenance is required and we understand the market is still willing to provide this. Also, the deductibles of defective design etc. (exclusion) are stated at £150K; major perils £25K and all others £10K are now confirmed.

Sum insured to include the value of equipment provided by the Trust. Such values are shown in Schedule 13.

Follow up (Sponsors') advice: *The necessary insurance protection will be arranged by ProjectCo where the equipment is to be either procured and/or installed and/or commissioned and/or maintained by ProjectCo.*

Willis: This suggests that the Trust will be made responsible for its own equipment.

Full value terrorism is required. The requirement does not say that this is not required during maintenance period, but there would be duplication if it were.

Third Party Public & Products Liability

Limit of indemnity of £75M is currently required. Any one Accident, except Pollution and Products liability which are in the aggregate.

This is the market standard for such coverage.

There is a requirement for cross liability, which may not sit well for insurers with the requirement in 2.8.5 for an exclusion for "Liability arising out of technical or professional advice other than in respect of death or bodily injury to persons or damage to third party property."

Insurers will usually refuse cross liability for such (technical or professional) advice not leading to death or bodily injury or property damage.

There is no requirement for any separate pollution liability coverage other than normal sudden and accidental.

Delay In Start Up

The Maximum Indemnity Period is left subject to confirmation, noted subject to Lender due diligence. [Now 39 months].
Willis will confirm the appropriateness of the period with the Funders Technical Adviser.

Full value terrorism is required.

Automatic reinstatement of sum insured is required.

This will be of little use unless there is also automatic reinstatement of the indemnity period. Many insurers are reluctant to give such an extension automatically, but require negotiation and the right to refuse reinstatement. We await details of the terms offered by the insurance market in due course.

The Waiting Period is indicated at 45 days but is also noted as subject to Lender due diligence.
Willis will discuss this issue with the Funders Technical Adviser.

(2) Operational Period

Property Damage

Insured Property does not specifically include equipment provided by the Trust.

Willis would expect inclusion; otherwise there will be a potential gap in the BI coverage.

Follow up (Sponsors') advice: The majority of the equipment that is provided will be the responsibility of the Trust to maintain during the operation phase with the exception of A1, A2 and L1 equipment. ProjectCo will not receive revenue deductions should the other equipment be unavailable.

Willis will discuss this issue with the Funders Technical Adviser.

Full value terrorism is required.

Follow up (Sponsors') advice: Noted – we do not envisage this being a problem and will be covered under the operational insurances.

Latent defects are an allowable exclusion.

We would not usually expect Funders to require better coverage here.

Third Party Public & Products Liability

Limit of indemnity of £75M is currently required. Any one Accident, except Pollution and Products liability which are in the aggregate.

This is the market standard for such coverage.

Worldwide jurisdiction is required, with similar (market standard) terms as the Construction Period.

(As we would expect)

There is a requirement for cross liability, which may not sit well for insurers with the requirement in 2.8.5 for an exclusion "Liability arising out of technical or professional advice other than in respect of death or bodily injury to persons or damage to third party property."

Insurers will usually refuse cross liability for such (technical or professional) advice not leading to death or bodily injury or property damage.

Medical Malpractice is an allowed exclusion.

(As we would expect)

There is no requirement for any separate pollution liability coverage other than normal sudden and accidental.

(As we would expect)

Business Interruption

The Maximum Indemnity Period is left subject to confirmation, noted subject to Lender due diligence. [Revised now to 39 months].

Willis will confirm the appropriateness of the period with the Funders Technical Adviser.

The deductible is indicated at £10K, but noted that Bidders should confirm an appropriate level.

We understand that this has been agreed between the Trust and the Bidder as acceptable.

An infectious diseases extension is required.

(As we would expect)

Full value terrorism is required.

(As we would expect)

Part 3 (Trust Endorsements)

*These are in the Standard Form for PF2 and as we would expect. When the risk is placed, we would expect a suitable form of Lenders Endorsements to be appended to the appropriate insurances. The most common format used is that originating from Zurich Insurance PPP policy form. This is attached as **Appendix D** to this report.*

Part 4 (Insurance premium Risk Sharing)

*This is in the Standard Form for PF2 and as we would expect. When the procurement is further advanced, we would expect the **Base Cost** figure to be available for review and discussion with the Funders Financial Adviser.*

Part 5 (Brokers Letter of Undertaking to the Trust)

The draft wording has been struck through.

*We assume that a bespoke wording agreed with the Authority or **IUK** will be utilised. This is not an uncommon situation in UK PF2 projects.*

(Sponsor comments upon the PA confirm that this is under review.)

The Trust's insurance advisor has commented as follows:

"Willis PRP 29.05.15 = Schedule 21 Part 5 contains a draft Broker's Letter of Undertaking. It is not anticipated that the drafting will change however it is recognised that certain insurance brokers sign up to differing "standard" insurance broker undertaking letters ("BLU"). Carillion are using Aon as insurance broker, whose agreed form of BLU is the form known as the "HMT Option B Letter" with a limit of liability of £5m (the "Option B BLU"). This form of BLU is different from that contained in Schedule 21, Part 5. Accordingly it is agreed that at financial close when (and for so long as) Aon UK Limited are Project Co's insurance brokers, a BLU in the form of the Option B BLU will be acceptable in place of that in Schedule 21, Part 5."

This position appears reasonable, but will need to be confirmed as such by Lenders' Legal Advisers.

Schedule 34 (Insurance Proceeds Account Agreement)

[This should be reviewed by the Funders Legal Adviser to confirm that it is appropriate for the financing arrangements on a PF2 project such as this.]

SUB-CONTRACTS

We have briefly reviewed the following:

- Draft Construction Contract (Linklaters: 25.03.2015) & Schedule 1:

This Agreement is made the [] 20[] between:

- [] LIMITED (registered under number []) whose registered office is [] (“**Project Co**”); and
- **CARILLION CONSTRUCTION LIMITED** (registered under number 594581) whose registered office is situated at [24 Birch Street, Wolverhampton WV1 4HY] (the “**Contractor**”).

The draft is marked:

“NOTE: This agreement will require to be updated to reflect (inter alia) the final Project Agreement when agreed with the Trust, and the outcome of the Due Diligence exercise (including that to be undertaken by the Senior Funders and their advisors)”

We would expect an appropriate pass-down of the liability and insurance obligations placed upon Project Co, downwards to the Construction Contractor, and we will discuss these obligations in more detail with Lenders Legal Advisers.

This agreement will also need to be reviewed in conjunction with the insurance obligations that will be set out in the financing agreement, when it is drafted.

The insuring obligations are set out in Clause 36 and appear as we would expect for a PF2 related Construction Contract of this nature.

[We have not reviewed the insurance Schedule 21. We understand that the key provisions are as follows: Sub-contract specific – Project Co to procure Project insurances.]

- Draft Services Contract (Linklaters: 26.03.2015) & Schedule 1:

This Agreement is made the [] 2015 between:

THE HOSPITAL COMPANY (SANDWELL) LIMITED (registered under number []) whose registered office is [] (“**Project Co**”), which term shall include its permitted successors or assignees); and

CARILLION SERVICES LIMITED (registered under number []) whose registered office is [] (the “**Service Provider**”, which term shall include its permitted successors or assignees).

The draft is marked:

“NOTE: This agreement will require to be updated to reflect (inter alia) the final Project Agreement when agreed with the Trust, and the outcome of the Due Diligence exercise (including that to be undertaken by the Senior Funders and their advisors)”

We would expect an appropriate pass-down of the liability and insurance obligations placed upon Project Co, downwards to the Services (FV) (O&M) contractor, and we will discuss these obligations in more detail with Lenders Legal Advisers.

This agreement will also need to be reviewed in conjunction with the insurance obligations that will be set out in the financing agreement, when it is drafted.

The insuring obligations are set out in Clause 36 and appear as we would expect for a PF2 related service provision contract of this nature.

[We have not reviewed the insurance Schedule 21. We understand that the key provisions are as follows: Sub-contract specific – Project Co to take out and maintain the main Project insurances.]

CREDIT FACILITY AGREEMENT

[Willis has not yet been provided with a copy of the draft financing agreement to review.

We would anticipate this documentation being produced once the Preferred Bidder contract award has been officially made.]

INSURERS

1. Pre-Financial Close Insurance:

Willis understands that no insurances are required.

2. Construction Phase Insurance:

Willis has not yet been provided with confirmed details of the insurance proposals in connection with the Construction Works for the Project. (Carillion and Aon have undertaken to provide this in a timely manner.)

We would expect to review the following:

- Insurance Proposals in connection with the new Project assets built;
- (If applicable) any legal indemnity insurances arranged to cover defects in title or restrictive covenants, etc.;
- Confirmation of Statutory Insurances having been effected in accordance with the Project Agreement;
- Confirmation that the Building Contractor has the necessary level of Professional Indemnity insurance coverage for its Design & Construct PI exposure and that its supply chain are similarly protected – each in accordance with the [draft] Building Contract agreement.;

3. Post – Works Insurance:

This will be required in accordance with the terms of the Project's agreements (both Project Agreement and Credit Facility Agreement).

Market Security Information

[To be provided in due course.]

Please note that Willis cannot guarantee the solvency of any insurer or underwriter.

Willis Market Security reports on all insurers are made available on request.

Insurance Costs

We understand that the total premium for the construction period which has been used in the financial model is [£.]

We understand that the annual premium for the operational period which has been used in the financial model is [£.]

[On present market premium rates this appears to be in line with [outwith] current expectations.]

[The Financial Advisers] have advised that the following insurance costs have been confirmed to them by the Sponsor's broker:-

- Construction Period: [£.];
- [A contingency exists within the model's assumptions for IPT.]
- Operational Period: [£.];
- [A contingency exists within the model's assumptions for IPT.]

[Borrower's broker comment required here]

Willis Comment

[Willis Project Finance comment TO BE INSERTED here.]

APPENDICES

Appendix A Willis Scope of Work

[This Scope of Work in the engagement letter between Willis Project Finance and the Trust is agreed, but not yet signed.]

SCHEDULE 1

INSURANCE SERVICES ADVICE REQUIREMENT

1 Overall objective and general

- 1.1 Throughout this appointment the Consultant is to act for and on behalf of a Funder (albeit the identity of that Funder is not yet known) and that, in its absence, all matters relevant to a Funder are raised by the end of Stage 2.
- 1.2 Until the appointment of a Funder, the Consultant will act in accordance with the instructions of the Trustee (which for the avoidance of doubt, in this case being the First Trustee or the Preferred Bidder (in the latter case subject to this Agreement having been novated thereto)), which will hold the benefit of the advice on trust for a Funder.
- 1.3 The Consultant shall liaise with the shadow funders, technical and legal advisors advised to it by the Trustee and such other advisors as may be reasonably required.
- 1.4 The Consultant acknowledges and agrees that it may be required (at the reasonable request of the Trustee, the Preferred Bidder and/or the Funder respectively), to provide copies of any reports and/or information produced in accordance with the Insurance Service Advice Requirements as detailed in this Schedule 1 to:-
 - 1.4.1 any third party equity provider (the “**Equity Provider**”); and/or
 - 1.4.2 Infrastructure UK (“**IUK**”)

The Consultant agrees that the Equity Provider and IUK shall be entitled to rely on such reports and/or information, subject to their signing a letter of reliance in the form set out in Appendix 1 of this Agreement, together with any other reasonable requirements of IUK and the Equity Provider.

The parties agree that under no circumstances may the Consultant be named, or may any report produced by the Consultant (or summaries or extracts thereof) be used in any offering document or memorandum, prospectus or other offering material provided to prospective investors in connection with any offer, solicitation, promotion or invitation for the sale or purchase of, or an invitation, solicitation or promotion of any offer to acquire, securities.

2 Stage 1: Final Bid Stage

- 2.1 The Consultant shall complete this stage by 20 April 2015.
- 2.2 At this stage the Consultant will review the Project.
- 2.3 The Consultant will, as a minimum, carry out a review of the ITPD documentation and in particular will amongst other things:

- 2.3.1 review and become familiar with the Trust's insurance requirements as detailed in the ITPD documentation and subsequent clarifications;
- 2.3.2 review and comment on the Project Agreement and schedules from the position of a Funder. In preparing commentary the Consultant should bear in mind PFU's guidance regarding the standard form Project Agreement and schedules. The aim of the process is that the Consultant will ultimately be satisfied that the interests of a Funder are adequately addressed.
- 2.4 The preparation of the Stage 1 report should allow the Trust to reflect on any significant concerns raised, which may prompt a change to the ITPD documentation as issued during the remainder of the dialogue phase. The Stage 1A report shall be addressed to the Trust and Funder (or reliance shall be extended to the Funder when appointed) and shall also be made available to Bidders.
- 2.5 During this stage the Consultant shall consider the Trust's insurance requirements from a Funder's perspective.
- 2.6 The Trust's advisors will have the opportunity to review and have an open dialogue with the Consultant in respect of any key concerns at this stage.
- 2.7 The Consultant, in dialogue with the Trust's advisors, shall identify any key concerns, the potential exposure to and the mitigation of any risks to a Funder.

3 Stage 2: Post Evaluation of Draft Final Bids

- 3.1 This stage shall take place after the Trust has evaluated the Draft Final Bids and has declared them compliant. This stage is expected to start on the 27th April and must be complete by 25 June.
- 3.2 It is currently envisaged that this scope of work will only apply to one (1) bidder. The Trust, however, reserves the right to have the Consultant assess other bids, for example, should the identity of the bidder (identified in the appointment business case (the "ABC")) change. In this event the Consultant may recover additional costs to the extent that work completed to date is rendered redundant.
- 3.3 The Consultant shall review the final bid submission and the preferred solution of the bidder which the Trust is minded to take forward to appoint.
- 3.4 The Consultant shall review all relevant information provided by the relevant bidder by way of its final bid submission, clarification(s) issued and supporting documentation (including all the documents listed in Clause 4.6 and any commentary and/or mark up of the Project Agreement and schedules).
- 3.5 The Consultant shall meet with the bidder (or any replacement the Trust is minded to appoint) where appropriate and necessary.
- 3.6 At the end of this period, the Consultant shall produce a written report detailing its findings. The Consultant shall share their final draft report with the Trust and Preferred Bidder and provide an opportunity to discuss the report with them prior to it being finalised. The Consultant shall also meet with the Trust to present the findings of the report and be prepared to discuss any matters arising from time to time, prior to the approval of the ABC submission. The report shall as a minimum cover:

- 3.6.1 A review of the insurance provisions of Project Documentation in liaison with the legal advisors, to include, but not be limited to, where applicable, a review of:
- (a) the Project Agreement including all relevant Schedules;
 - (b) the loan documentation (if available)⁸;
 - (c) the FMP Contract (if available);
 - (d) the Technical Advisor's report;
 - (e) the constructions contract(s) (if available); and
 - (f) the operation and maintenance agreements (if applicable).
- 3.6.2 Risk review of the proposed construction and operational phases to include, but not be limited to:
- (a) reviewing the physical risks during the construction and operational phases of the Project, including insurance options for these risks together with consideration of the defects liability exposure for the Contractor;
 - (b) reviewing delay in completion risk and insurance cover during the construction phase;
 - (c) reviewing business interruption risk and insurance cover during the operational phase;
 - (d) reviewing third party liabilities and the insurance cover;
 - (e) identifying and reviewing any other miscellaneous exposures with regard to their insurability and the extent, nature and availability of such insurance cover;
 - (f) insurance programme review;
 - (g) an ongoing process of reviewing the proposals provided by the Contractor and its insurance advisor for the construction and operational phases and liaison with the insurance advisor to the Trust;
 - (h) recommendations for policy coverage improvements and self insured options;
 - (i) consideration of additional insurance options including whether latent defects insurance is appropriate;
 - (j) assessing premium projections and associated contingencies in the context of current market conditions;
 - (k) highlighting any potential insurance issues arising from the assumption of the maintenance obligations for any existing buildings by the Contractor; and

⁸ The loan documentation is not yet available or has not yet been provided to Willis.

⁹ Annotated as "Services Contract".

- (l) insurance documentation (if available).

3.7 Additional tasks during this stage shall include:

- 3.7.1 assisting and liaising with the Funder's legal advisors in relation to the insurance sections of loan documentation, including facility agreements and the Information Memorandum as appropriate;
- 3.7.2 assisting in the drafting of language in relation to Funder's special insurance requirements relating to the perfection of security (e.g. assignment, named insured provisions, loss payee clauses, cancellation/alteration provisions, notices clauses and non vitiation/breach of warranty cover requirements);
- 3.7.3 timing - establishing an action plan with the other insurance brokers to ensure that timescales for policy inception and the provision of insurance related documents are met and to avoid delay in meeting deadlines;
- 3.7.4 insurer security: commenting on the insurer and, where appropriate, reinsurer security;
- 3.7.5 liaison with the PFU, HM Treasury and other bodies as appropriate.

3.8 Reporting

3.8.1 A report will be provided dealing with the following:

- (a) review of the insurance provisions of the Project documents;
- (b) review of the principal fortuitous construction and operational risks;
- (c) review of the adequacy and integrity of the Insurance Programme and comment on its standard for a project of this type financed on a limited recourse basis;
- (d) confirmation that the proposed insurances comply with the requirements of the insurance provisions of project finance documentation including the provisions of Funder's special insurance conditions and assignment issues; and
- (e) identification of any areas of cover unavailability against a background of prevailing market conditions.

3.9 The Stage 2 report shall be addressed to the Trust and the Funder (or reliance shall be extended to the Funder when appointed) and shall also be made available to the Bidders.

(The remaining phases in the Scope of Work are omitted for clarity.)

Appendix B. List of Documents Reviewed

The Documents reviewed in the course of preparing this report are set out below:

- Sandwell - The Midland Metropolitan Hospital Project - Schedule 21 – [●];
- Sandwell - The Midland Metropolitan Hospital Project - Project Agreement [23371255.24\gh01];
- Sandwell - The Midland Metropolitan Hospital Project - Schedule 11;
- MMH PA Insurance Table of Comments - 260215 (Clean);
- Aon Operational General Questionnaire - Midlands Metropolitan Hospital - 18112014 v1;
- Construction Proposal Form - Midland Metropolitan hospital - RM tracked changes;
- MMH - Outline Method Statement;
- MMH – Sprinklers;
- mmh insurance info;
- DOC102 - List of Surveys at Grove Lane.pdf
- DOC103 - Ground Remediation 2.6.pdf;
- Standard Form PF2 Guidance on Insurance;
- Lenders' Shadow Technical Adviser Due Diligence Report (MAMG Document)(draft dated: 20.04.2015);
- Draft Construction Contract (Linklaters: 25.03.2015) & Schedule 1;
- Draft Services Contract (Linklaters: 26.03.2015) & Schedule 1;
- Table of Comments on Project Agreement - Midland Metropolitan Project;
- Table of Comments on Construction Agreement - Midland Metropolitan Project;
- Table of Comments on Services Agreement - Midland Metropolitan Project.

[Willis comments on the above 3 items to following a separate electronic attachment.]

Appendix C. Evidence of Insurance

[This will not be provided until nearer the time that coverage is required to be placed.]

Appendix D. Zurich Insurance PPP policy: Form of Lender/Authority Endorsements

LENDERS AND AUTHORITY'S INSURANCE POLICY ENDORSEMENT

Notwithstanding any other provision of this Policy, the following endorsement shall apply:

Section I: Definitions

1. In this endorsement:

Authority means [].

Facilities Agreement means the agreement dated [] between, amongst others, Project Company and the Facility Agent;

Facility Agent means [] in its capacity as agent and trustee for the Finance Parties and includes its successors in that capacity;

Finance Parties has the meaning given to it in the Facilities Agreement and includes any assignee, transferee, successor or novated, replacement or additional creditor of or in relation to any of the foregoing;

Insured means those parties so described in the Policy Schedule;

Insurers means the insurer or insurers underwriting this insurance policy;

Joint Insurance Account means the account held in the joint names of Project Company and the Authority with [name of bank] with account number [] and sort code [].

Project has the meaning given to it in the Facilities Agreement;

Project Company means [] Limited;

Project Company Insurance Proceeds Account means the account in the name of the Project Company with [name of bank] with account number [] and sort code [].

Section II: Policy formation / basis

2. Separate Policy

All the provisions of this Policy (except for those relating to limits of liability) shall operate as if there were a separate policy covering each Insured. Accordingly, the liability of the Insurers under this Policy to any one of the Insured shall not be conditional upon the due observance and fulfilment of any other Insured of the terms of this Policy and of any duties imposed upon it relating thereto and shall not be affected by any failure in such observance or fulfilment of any such other Insured.

3. Interest of the Finance Parties and the Authority

- 3.1 The Insurers acknowledge that the Finance Parties and (in respect of third party liabilities) their respective officers, directors, employees, secondees and assigns are each additional co-insureds under this Policy and that the premium specified in this Policy provides consideration for their being co-insured parties.

- 3.2 The Insurers acknowledge that the Authority and (in respect of third party liabilities) its officers, directors, employees, secondees and assigns are each additional co-insureds under the sections of this Policy relating to material damage risks and public liability risks and that the premium specified in this Policy provides consideration for their being co-insured parties.

4. Liability for premium

Neither the Facility Agent, the Finance Parties nor the Authority shall be liable for the payment of any premium under this Policy although they may choose to pay the premium. This provision shall not relieve the Project Company from its obligations to pay any premium under this Policy.

5. Disclosure

- 5.1 The Finance Parties shall have no duty of disclosure to Insurers in relation to the Policy. Nevertheless, on the written request of the Insurers, the Finance Parties shall provide the Insurers with access to any relevant due diligence report(s) commissioned by the Finance Parties relating to the Project and the

Insurers shall keep such report(s) confidential and shall accept such information without rights of recourse against the party / parties that prepared the said reports.

- 5.2 The Insurers acknowledge to the Finance Parties alone that (i) they have received adequate information in order to evaluate the risk of insuring Project Company in respect of the risks hereby insured on the assumption that such information is not materially misleading, (ii) there is no information which has been relied on or is required by Insurers in respect of their decision to co-insure the Finance Parties or their directors, officers, employees or agents, and (iii) in agreeing to enter into this Policy, they have not relied upon or taken into account any information supplied to them by any Finance Party. The acknowledgements provided by the Insurers in this clause 5.2 shall have no effect on any rights that Insurers might have had under or in relation to the Policy against any party (including Project Company) other than the Finance Parties and the Facility Agent in the absence of such acknowledgements.
- 5.3 Non-disclosure or misrepresentation by one Insured shall not be attributable to any other Insured who did not actively participate in that non-disclosure or misrepresentation. Without prejudice to the protections afforded to the Insured by this endorsement, no one Insured represents or warrants the adequacy or accuracy of any information provided or representation made by or on behalf of any other Insured.

Section III: Rights to avoid / cancel or change Policy terms

6. Non-vitiation

- 6.1 The Insurers undertake to each Insured that the Policy will not be invalidated as regards the rights and interests of such Insured and that the Insurers will not seek to avoid any liability under this Policy because of any act, neglect, error or omission made by any other Insured, including any failure by any other Insured to disclose any material fact, circumstance or occurrence, any misrepresentation by any other Insured or any breach or non-fulfilment by any other Insured of any condition, warranty or provision contained in the policy.
- 6.2 The Insurers agree that no Insured shall be penalised or prejudiced in any way by any unintentional or inadvertent misrepresentation, non-disclosure, want of due diligence or breach of any declaration, terms, condition or warranty of this Policy (together "the Relevant Matter"), but that this shall not apply as regards the individual Insured responsible for the Relevant Matter if that Insured fails to notify the Insurers or the brokers through whom the Policy was placed as soon as reasonably practicable after the management or managers of that Insured become aware or are made aware of the Relevant Matter.

7. Cancellation

- 7.1 The Insurers agree that they shall not seek to cancel or suspend the construction phases of this insurance except: (i) for non-payment of premium; or (ii) where an insured party consistently fails to comply with Insurers' requirements relating to survey or loss control action points; or (iii) where an insured party is in breach of an applicable Joint Code of Practice (or equivalent).
- 7.2 The Insurers shall promptly notify the Facility Agent and the Authority in writing in the event of any:
- 7.2.1 suspension, cancellation of Sections 1, 2 and 3 permitted by clause 7.1 above; or
 - 7.2.2 in the case of cover under Sections 4, 5 or 6 of this Policy (material damage - operational period; loss of revenue - services; public liability - services), cancellation or non-renewal of this Policy by the Insurers or by the Insured. The cover provided by this Policy shall continue in force and unaltered for at least 30 days after written notice of such suspension, cancellation, termination or (in the case of cover under Sections 4, 5 or 6) non-renewal is given to the Facility Agent and the Authority. Nothing in this clause shall give the Insurers any right to suspend, cancel or terminate this Policy which the Insurers do not otherwise have under this Policy.
- 7.3 The Insurers shall promptly notify the Facility Agent and the Authority in writing of any default in the payment of premium and shall give the Facility Agent and the Authority at least 30 days notice in writing before voiding this Policy for non-payment of premium, in order to give an opportunity for that premium to be paid within the notice period.

8. Changes in cover

The Insurers shall give the Facility Agent and the Authority at least 30 days notice in writing before any reduction in cover or increase in excess or deductible under this Policy takes effect. Nothing in this clause shall give the Insurers any right which they do not otherwise have to reduce cover or increase any excess or deductible under this Policy.

9. Amendments to Endorsement

During the term of this Policy, the provisions of this endorsement may only be amended by written agreement between Project Company, the Insurers and the Facility Agent, such amendment to be endorsed on the Policy.

Section IV: Claims

10. Notice of claims

- 10.1 Notice of claim by the Authority or the Finance Parties or any other party entitled to indemnity under the Policy shall, in the absence of manifest error, be accepted by Insurers as a valid notification of claim on behalf of all other Insureds subject to the full terms of the Policy.

11. Claim Payments / Loss Payee

Payments made in accordance with this Clause 11 shall, to the extent of the payment, discharge the Insurers' liability to pay the Project Company or any other Insured.

11.1 In respect of the insurance under this Policy of material damage risks only

All claim payments or return premium shall be paid into the Joint Insurance Account or to such other account as the Facility Agent as loss payee may specify in writing.

11.2 In respect of the insurance under this Policy of public liability risks only

All claim payments in respect of a third party liability shall be paid to person(s) whose claim(s) constitute the risk or liability insured against except in the case where the Insured has properly discharged its liability to such person(s), in which case the claim payment shall be paid to the Project Company Insurance Proceeds Account or such account as the Facility Agent directs in writing.

Any return premiums shall be paid to the Project Company Insurance Proceeds Account or such other account as the Facility Agent directs in writing.

11.3 In respect of the insurance under this Policy of loss of revenue risks only

All claim payments or return premiums shall be paid to the Project Company Insurance Proceeds Account or such other account as the Facility Agent directs in writing.

11.4 Set-off

Insurers may, at their discretion, deduct overdue unpaid premium from claims settlements but shall not set off or deduct premium that is not overdue or any other amounts payable by the Project Company under or in relation to the Policy.

12. Waiver of subrogation

The Insurers waive all rights of subrogation howsoever arising which they may have or acquire against any Insured described within the appropriate Schedules arising out of any Occurrence in respect of which any claim is admitted and is insured hereunder for the benefit of such Insured except against any:

- (i) such Insured (or officer, director, employee, agent or assign) who has caused or contributed to such an occurrence or claim by fraud, deliberate misrepresentation, deliberate non-disclosure or deliberate breach of policy condition; or
- (ii) consultant or equivalent professional party to the extent that their professional errors, omissions or activities not covered by this Policy have caused or contributed to a loss covered under this Policy; or
- (iii) supplier or manufacturer to the extent that their errors, omissions or activities not covered by this Policy have caused or contributed to a loss covered under this Policy; or
- (iv) such Insured to the extent that they are entitled to recover in respect of a loss under cover falling within sub-clause 13(a)–(e) below (or would be so insured if cover in the terms set out in this Policy had not been taken out); or
- (v) in relation to losses paid under Sections 4 or 5 of the Policy (material damage - operational period; loss of revenue – services), any Insured who is not covered under those Sections. However Insured B (The Authority) shall enjoy a waiver of subrogation under Insurance sections 2 & 5 whether or not it is insured under said sections

13. Primary insurance

The Insurers agree that this insurance provides the primary cover for risks insured under this Policy. In the event that any risk insured under this Policy is also insured under any other policy of insurance effected by any Insured, the Insurers agree to indemnify the Insured as if such other policy of insurance did not exist except in respect of:

- (a) excess layers of third party cover effected specifically for the Project;
- (b) any public liability claim against the Insured which exceeds the applicable limit of indemnity under this Policy, in which case the liability of the Insurers for additional legal costs and expenses shall

be limited to the proportion that the applicable limit of indemnity bears to the total claim against the Insured;

- (c) any claim under this Policy to which a Marine 50/50 Clause applies;
 - (d) any claim made under a Contingent Motor Liability extension to this Policy; or
 - (e) any claim relating to a loss which is insured against (or would be insured but for a double insurance provision or similar or the application of a deductible) under:
 - (i) any other policy specifically effected for the construction or operational phase(s) of the Project; or
 - (ii) a latent or inherent defects policy or engineering or mechanical breakdown policy specifically effected for the Project;
- or a related business interruption insurance policy.

Section V: Miscellaneous

14. Notice of Security Interest

The Insurers acknowledge that by an assignment contained in a debenture dated [] (the "Assignment"), Project Company assigned by way of security to the Finance Parties all benefits and rights in respect of this insurance and all claims and returns of premiums in respect thereof to which the Insured is or may at a future time become entitled. The Insurers confirm that they have not been notified of any other assignment of or security interest in Project Company's interest in this insurance.

However, this acknowledgment is invalid should the provisions of said assignment contradict those contained within this Policy.

15. Notice

- 15.1 All notices or other communications under or in connection with the Policy will be given by fax and post. Any such notice given by Insurers will be deemed to be given on the earlier of:

15.1.1 if by fax, when transmitted but only if the sender's fax machine confirms successful transmission; and

15.1.2 if by post, within 2 business days of release from the relevant Insurer's office.

- 15.2 The address and fax number of the Facility Agent for all notices under or in connection with the Policy are those notified from time to time by the Finance Parties for this purpose to the insurance broker at the relevant time. The initial address and fax number of the Facility Agent is as follows:

The Facility Agent: [Insert details]

Address: [Insert details]

Fax No: [Insert details]

Attention: [Insert details]

- 15.3 The address and fax number of the Authority for all notices under or in connection with the Policy are those notified from time to time by the Authority for this purpose to the insurance broker at the relevant time. The initial address and fax number of the Authority is as follows:

The Authority: [Insert details]

Address: [Insert details]

Fax No: [Insert details]

Attention: [Insert details]

16. Governing law & Jurisdiction

The Policy shall be governed by and interpreted in accordance with English law.

This endorsement overrides any conflicting provision in this Policy.

Midland Metropolitan Hospital Project

Shadow Technical Due Diligence

Stage 2 Report

June 2015

prepared by:

MAMG Consultancy Limited

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INTRODUCTION

This report comprises the Stage 2 Report – Draft Final Bid, based on a review of the Draft Final Bid submitted by the Bidder in April 2015.

The report is solely for the purpose of providing technical advice in accordance with the agreed appointment terms between MAMG Consultancy Limited and the Trust, and as per the Scope of Service for Stage 2, reproduced in Appendix 1. No liability can be accepted by MAMG Consultancy Limited in respect of any other party other than the Trust arising from the submission of this Report. This Stage 2 report is also addressed to the First Trustee and the Funder (or reliance shall be extended to the Funder when appointed) and shall also be made available to the Bidder as required.

The Report, whilst containing the necessary observations and opinions for Stage 2 of the Scope of Service, is presented in a form that can be further developed to the full final technical due diligence that will be required at Financial Close.

EXECUTIVE SUMMARY

Project Overview

The Midland Metropolitan Hospital (MMH) is to be delivered through a PF2 contract form, which will provide a new build hospital, including some equipment and passive IM&T, with hard FM and life cycle services provided for 30 years following completion. It will be delivered through a Project Co in contract with the Trust through a Project Agreement. The Project Co is likely to enter into separate subcontracts for construction and facilities management services, linked through an interface agreement.

The Site

A 6.76 hectare brownfield site previously in industrial use. The site is located between Grove Lane and the Cape Arm of the Birmingham Canal Navigation at Cape Hill, Smethwick.

Anticipated Key Dates

- Financial Close: 9 December 2015
- Construction Completion: 16 July 2018
- Hospital operational: 8 October 2018
- Expiry: July 2044 (30 years from construction completion)

The facility

- Floor Area: hospital: 82,257 m²; atrium: 6,325 m²; and car park: 45,738 m²
- Capex: c. £291m.




Services – hard FM (no soft FM)

- General Services
- Helpdesk Services
- Maintenance
- Lifecycle
- Unprogrammed Maintenance
- Equipment
- Energy & Utilities Management
- Pest Control
- Grounds Maintenance



- Elective services (PAT testing, external and internal window cleaning)




Red, Amber, Green Analysis

Within this Executive Summary, we highlight the key technical details of the development, summarising our technical observation and allocating a Red, Amber or Green ("RAG") rating in line with the following table:


Rating	Comment	RAG
Green	A project aspect attracting a green rating is considered a typical or accepted risk, or suitable full technical mitigation has been received to ensure minimal technical project effects (or where documentation and project information appear sufficiently advanced for this stage, however further verification or detail may be required prior to Financial Close.)	
Amber	A project aspect attracting an amber rating should be noted by the Funder as a medium risk profile at this stage and may require further consideration before moving to a 'green'.	
Red	A project aspect attracting a red rating should be considered by the Funder as a significantly higher than expected risk profile that could have significant impact on the project from a technical perspective.	

Key Parties


Area	Comment	RAG
Contractor	We are satisfied that Carillion Construction has the necessary experience, capability and capacity to deliver the construction elements of the project.	
Architect	We have no concerns with the capability of HKS Architects, Sonnemann Toon Architects and Edward Williams to be able to fulfil their obligations as Architects on the MMH scheme	







Area	Comment	RAG
M&E Engineer	We have no concerns with the capability of NG Bailey & Aecom Ltd being able to fulfil their obligations as Services Engineer on the MMH scheme.	
C&S Engineer	We have no concerns with the capability of Curtin Consulting being able to fulfil their obligations as Civil & Structural Engineer on the MMH scheme.	
FM Service Provider	Carillion currently provide Facilities Management Services to a number of large UK PFI procured Hospitals. We are confident that Carillion are capable to deliver this service for the MMH scheme.	

Design and Engineering




Area	Comment	RAG
Design (Architectural, Civil & Structural, Mechanical & Electrical)	<p>We have reviewed the Design and Construction Requirements in detail (refer Section 3.1) and are satisfied that they represent standard requirements for such projects, e.g.</p> <ul style="list-style-type: none"> • Design life expectancies • Resilience and capacity requirements • Fire safety • Energy • Sustainability • Building element performance specifications • Preliminaries • Technical commissioning • IM&T • Equipment • Environmental (use condition) criteria. [Availability criteria to be clarified as RDS progress.] 	

Area	Comment	RAG
	<p>We have also reviewed the Architectural, Civil & Structural and Mechanical & Electrical elements of the Carillion consortium Project Co proposals. We are generally satisfied with the compliance of the proposed design and systems subject to further detailed design development as the project progresses. We have considered a wide range of design elements, including:</p> <ul style="list-style-type: none"> • Fire safety systems and access • Emergency lighting & exit signage • Smoke ventilation system • Means of escape and travel distances • Structural fire resistance • Acoustics • Security, CCTV and alarms • Equality <p>Some asbestos and contaminants in the groundwater will require to be addressed, though risk is substantially mitigated – see below. The piled foundation solution appears to be properly considered.</p> <p>At this stage the structural design looks satisfactory, though detailed design will be required at later stage for some elements, e.g. the ground floor slab and lower ground floor damp proofing. We are satisfied that this is normal considering the stage of the project and should not represent any risks to the project proceeding.</p> <p>We have reviewed the mechanical and electrical engineering solution. The detailed design is still on-going, however our initial review indicates a robust approach, allowing for necessary resilience and capacity, and, based on the submitted documents, discussion with the contractor and received comments we would confirm that the proposed design solution in principal conforms to the HTM standards and is agreement with the general design principles as defined in the</p>	



Area	Comment	RAG
	<p>client's brief. There are a range of queries we have raised that will be considered as the detailed design develops at later stage. We are satisfied that this is normal considering the stage of the project and should not represent any risks to the project proceeding.</p> <p>We have considered:</p> <ul style="list-style-type: none"> - Energy target, including renewable technology which should integrate appropriately to the design, however there are still a few areas of clarification on the model to confirm it has been properly developed. - Plant room and riser strategy. It generally looks well thought through, however we have a range of outstanding queries that may be addressed at the next stage. <p>We note that the general design development appears appropriate to the project stage. However, we have identified a range of areas that we are of the opinion still need further developed, though we are satisfied that this is normal considering the stage of the project.</p> <p>Mechanical Services: at this stage we have reviewed Carillion's proposals in detail and have forwarded queries, which are still going through a question & answer process. We are satisfied, however, that these should not prevent the project proceeding to the next stage</p> <p>Electrical Services: at this stage we still have a range of queries and information requests that are outstanding, however these can be addressed at the next stage as design develops, and should not prevent progress to the next stage.</p>	
Equipment	<p>We are satisfied with the approach to equipment so far. We have reviewed Schedule 13 to the PA and the associated equipment spreadsheet. Refer Section 3.7.</p>	

Area	Comment	RAG
Environmental	In Section 3.2 we provide an overview of the site and the current available surveys. At this stage we are satisfied that the approach to surveying the site, site clearance and remediation by the Trust should provide a site that will properly allow the Bidder to take the ground condition, and associated groundworks and foundation design risk, within their proposals. Further, whilst further surveys are still to be provided, the intention is that the Trust will remediate what is identified and Carillion will come in to approve those works. This should have the effect of mitigating the risk of unanticipated remediation work being required during the construction phase.	
Condition Surveys of Existing Buildings	Not applicable	
Demolition Methodology	Not applicable	
Planning	Planning is still progressing at this time (detailed planning to be submitted on 26 June 2015) and we will further review as the conditions are clarified as the project progress, however there are no matters that present any concerns at this stage.	
Health and Safety	TPS Schal were originally appointed as CDM Coordinator (and will be retained to support with the transfer to the new CDM regulations being appropriately addressed) and we are satisfied that health & safety has been appropriately considered for this stage of the project.	
BREEAM	There is a BREEAM Healthcare Excellent requirement, which we do not consider being unusually onerous, subject to proper development of the design. The details of the BREEAM assessment provided in the draft final bid indicate that it should be achieved.	

Construction



Area	Comment	RAG
Programme and Phasing	We have reviewed the construction programme provided by Carillion and are satisfied that the timescales can be achieved, bearing in mind the site clearance and remediation being undertaken by the Trust and the early works anticipated by the Bidder before Financial Close. The programme appears to have followed an appropriate logic and progression, including testing and commissioning, and general site methodology.	
Construction Cost	We have undertaken a review of the construction costs comparing to benchmarks of similar projects, adjusting for the pricing base date. We are satisfied that the pricing is, whilst competitive, sufficient for the project with appropriate allowances for site restrictions, ground conditions and general risk.	
Cashflow	We have reviewed the construction cashflow against the programme and against typical cashflow profiles from other projects. We are satisfied that the cashflow appropriately reflects the programme without being frontloaded.	

Operational Phase



Area	Comment	RAG
Service Level Specification	In Section 5.1 we review the services output specification in detail and are satisfied that they represent standard requirements for such projects.	
Performance Standards	In Section 5.1 we review the performance standards. Our initial review indicates that they represent standard requirements for such project. Our review of the consortium's method statements and discussions with the FM provider provided confirmation in relation to their ability to respond to and deliver the requirements. We	




	<p>understand that these are being up-dated with the Trust to improve clarity and interpretation, however these are yet to be forwarded.</p>
<p>Review of Method Statements</p>	<p>The Bidder has provided detailed method statements. We have reviewed these and are satisfied that they have appropriately considered the requirements of the project. In particular we note that:</p> <ul style="list-style-type: none"> - Resourcing and management structures appear to have been appropriately considered. - Appropriate technologies and systems. - Maintenance appropriately supported through annual, 5 year and statutory maintenance plans. <p>We have reviewed and are satisfied with the competency apparent in the method statements for each area of services:</p> <ul style="list-style-type: none"> - Estates and Maintenance - Grounds Maintenance - Pest Control - Utilities - Helpdesk - IMT
<p>Facilities Management Costs</p>	<p>General FM Management, Estate, Ground Maintenance and Helpdesk Services are all below the lower-middle quartile of MAMG benchmark range and provide a competitive viable price when compared to the market, while Pest Control Service is below the lowest end of the MAMG benchmark range, though is a small element of the overall fee and fully contracted to Rentokil, so we are satisfied has been appropriately considered.</p> <p>We are also satisfied that the startup costs proposed for the FM provider should be adequate.</p>

Lifecycle Review



Area	Comment	RAG
Background	We are in receipt of detail life cycle modelling which indicates that a robust and properly considered approach to the costing has been used, including appropriate allowance for the arising unprogrammed maintenance as well as major capital replacement through the project term, split appropriately between different elements of the facility and considering handback requirements.	
Lifecycle Cost	We have considered the life cycle costing levels against our indexed benchmarking database of similar projects. This indicates that whilst competitive, sufficient funds should be available to properly deliver the project over the longer term.	








Payment Mechanism

Area	Comment	RAG
Calculation of Service Payments	In Section 8 we review the payment mechanism in detail. We are satisfied that it is an appropriate approach, with market familiarity, being deliverable and manageable by Project Co. We have a range of interpretative clarifications that we do not consider to be material at this stage and can be addressed during the next stage.	
Performance Deductions	Consideration of the delivery of the various performance standards indicates that they are deliverable and mostly relate to good management, organisation and systems. There are a number which relate to unprogrammed maintenance. Initial review indicates that the FM pricing has appropriately allowed for the level of deductions that may typically be experienced.	


Area	Comment	RAG
Unavailability and Weighting / Gearing	Availability deductions are calculated by reference to the weighting of Functional Areas and the groups of rooms (Functional Units) within each FA. This indicates a 300% weighting at FA level. Weighting of the FUs increases the gearing to 450%. MAD increases to 458%. We are satisfied that this is a market level of deduction and that the FM pricing has appropriate allowances for such deductions.	
Events of Default	<p>The SFP levels proposed for events of default, compared to two recently signed major hospital PFIs (considering adjustments for floor area), indicates similar levels, [but these projects had the additional CI 44.3(c) mechanism, which is excluded on this project.]</p> <p>[At this stage, we are unsure as to how adequate windows to the FM sub-contract and then the facility agreement will be constructed, both in relation to the time period of point accrual and the threshold of the SFP accrual compared to the PA]</p> <p>]</p>	
Energy	We have reviewed the energy painshare/gainshare mechanism in the payment mechanism (refer Section 8) and are satisfied that this is a well recognised approach. Refer above in relation to the 42 GJ/100m3 pa target.	





Contract Review – Project Agreement

Area	Comment	RAG rating
General	From a technical perspective we are satisfied with the requirements of the PA, subject to any earlier technical observations in this report.	
Land Issues	Surveys and on-going site matters are still being addressed. Refer 'Environmental' above.	


Area	Comment	RAG rating
Design and Construction	We are satisfied BREEAM requirements and 42 GJ/100m ³ pa energy target are achievable. Detailed design is on-going. Refer above. Capital contribution aspect will need a final check, including the CCAF adjustment, but can be addressed at a later stage.	
Services	No comment at this stage	
Warning Notice Levels	Refer comment in Payment Mechanism	
Delay Events	They appear to be standard industry requirements	
Relief Events	They appear to be standard industry requirements	
Termination	Refer comment in Payment Mechanism	
PA Schedules	We provide limited technical comment at this stage, however as schedules are populated with the agreed technical information we will further opine where necessary at later stage. Most of this information will have been considered earlier in this report.	





Contract Review – Construction Contract

Area	Comment	RAG rating
Introduction	We have reviewed both the draft Heads of Terms and the preliminary drafting of the construction sub-contract to be entered into between Project Co and Carillion Construction Ltd. We are satisfied with the technical elements of the sub-contract, subject to the final check of the	


	technical components as the projects is finalised. Most of the related technical issues have been reviewed earlier in the report.	
Liability	The HoTs and preliminary draft of the sub-contract indicate a liability cap of 50% of capex, which is market and supported by our contractor replacement model.	
Long Stop Date	HoTs and preliminary drafting of construction sub-contract indicates 12 months long stop date, which should provides an appropriate 6 month window with the PA.	
Liquidated and Ascertained Damages	We have considered the proposed calculations for the liquidate and ascertained damages and are satisfied that levels proposed have been appropriately constructed based on genuine pre-estimate of loss. We also note that the LAD liability cap has been appropriate calculated based on LADs through the PA long stop date.	
Schedule	We provide limited technical comment at this stage, however as schedules are populated with the agreed technical information we will further opine where necessary. Most of this information will have been considered earlier in this report.	

Contract Review – Service Contract

Area	Comment	RAG rating
Introduction	We have reviewed both the draft Heads of Terms and the preliminary drafting of the services sub-contract to be entered into between Project Co and Carillion (AMBS) Ltd. We are satisfied with the technical elements of the sub-contract, subject to the final check of the technical components as the projects is finalised. Most of the related technical issues have been reviewed earlier in the report.	

Area	Comment	RAG rating
Liability	The HoTs and preliminary drafting of the services sub-gives liability caps of 100% operational and a 200% termination liability cap. This is market and verified by our contractor replacement modelling.	
Warning Notices and Events of Default	[Further consideration of appropriate pass down of SFP related default is required.]	
Life Cycle & Maintenance	We are satisfied that the necessary life cycle and maintenance requirements are market and have been appropriately considered to support the Project Agreement requirements.	
Schedule	We provide limited technical comment at this stage, however as schedules are populated with the agreed technical information we will further opine where necessary. Most of this information will have been considered earlier in this report.	

Contract Review – Interface Agreement

Area	Comment	RAG rating
Interface Agreement	<p>An interface agreement will be agreed between Project Co, FM (Carillion (AMBS) Ltd) and construction (Carillion Construction Ltd)</p> <p>At this stage it is intended that it will be based directly on the contract agreed at the Royal Liverpool Hospital project, but is otherwise at an early stage of drafting and can be finalised at a later stage.</p>	


Contract Review – Common Terms Agreement

Area		Comment	RAG rating
Common Agreement	Terms	[Preferred Bidder]	<div></div>
Life Cycle Reviews		[Preferred Bidder]	<div></div>
Maintenance Reserve Account		[Preferred Bidder]	<div></div>
Project Co Reports		[Preferred Bidder]	<div></div>
Technical Certification	Advisor	[Preferred Bidder]	<div></div>
Conditions Precedent		[Preferred Bidder]	<div></div>

Insurances

Area	Comment	RAG rating
Professional Indemnity Insurance	[Preferred Bidder]	<div></div>
Construction Phase	[Preferred Bidder]	<div></div>
Business Interruption insurance	[Preferred Bidder]	<div></div>

Equator Principles

Area	Comment	RAG rating
Equator Principles Categorisation	This is a Category C project: being a hospital project it is designed for positive social and environmental consequences; for the benefit of clinical services and healthcare provision for the local population.	

TECHNICAL DUE DILIGENCE STAGE 2 CONCLUSION

Our technical review of all the draft Project Agreement and the ITPD documentation together with the technical information provided in the Draft Final Bid, in relation to the Midland Metropolitan Hospital Project indicates, from a Lender's perspective, that the overall risk allocation between Project Co and the Trust is not unduly onerous and that the Bidder has appropriately considered their technical obligations for this project. There are still some areas of detailed development and technical consideration, however we are satisfied from our review that the project may proceed to the next stage. We highlight areas that may require further consideration, though we do not consider any to represent a material obstacle at this stage.



Edward Davies
BSc (Hons), MSc, MAPM, FRICS
Operations Director

	Name	Signed	Date
Checked by:	Darran Muir BSc (Hons), MRICS Projects Director		[]

PROJECT SUMMARY

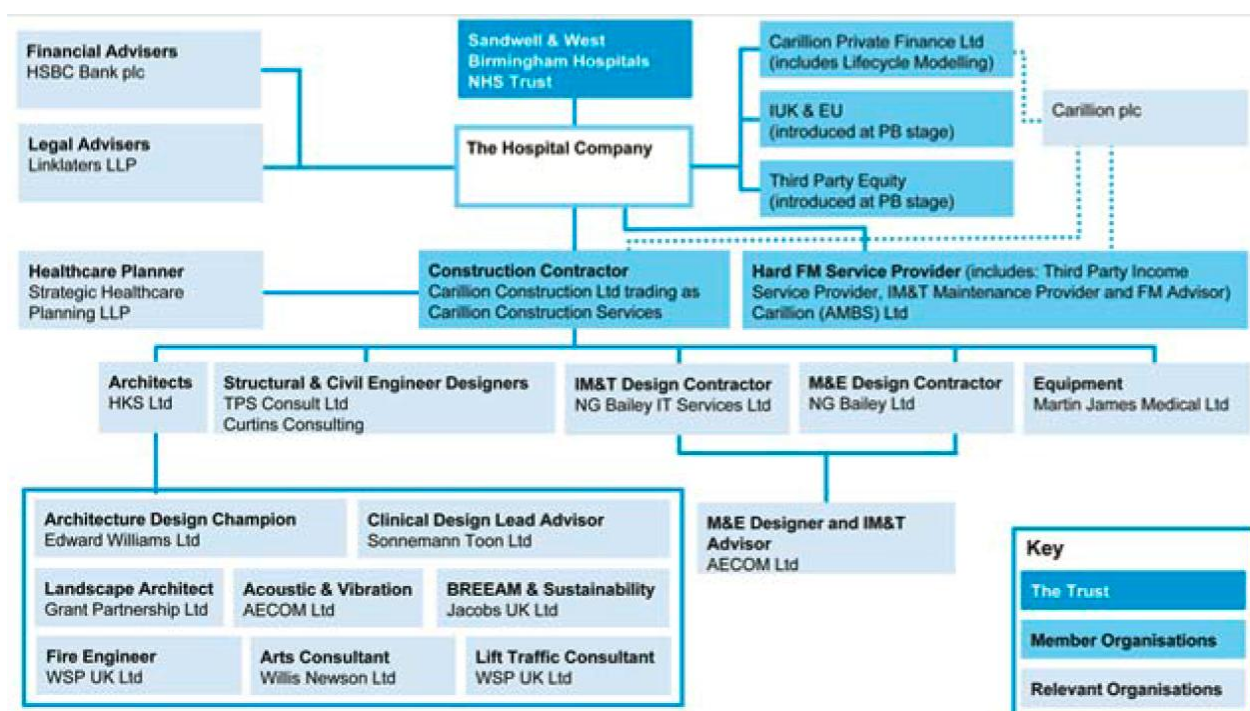
[TO BE COMPLETED TO REFLECT THE FINAL PROJECT POSITION AT FINANCIAL CLOSE]

Project Name:	Midland Metropolitan Hospital
Form of Contract:	PF2 Project Agreement, subject to project specific amendments
Summary Of Work:	The project involves the design, build, finance and maintenance of a single phase new build facility which will ensure that the majority of the Trust's acute care can be provided on one site in fit for purpose facilities. The site for the new acute hospital has an area of 6.76Ha, bounded by Grove Lane, London Street, Cranford Street and Cape Arm canal.
Costs Summary:	
Floor Area (m ²)	Hospital: 82,257 m ² Atrium: 6,325 m ² Car park: 45,738 m ²
Capex:	£291,802,476
Capex (£/m ²)	£3,547.45
Hard FM pa	£2,850,272
Hard FM pa/m ²	£34.65
LC Fund	£54,608,104
Ave LC pa	£1,819,524.84
Ave LC/m ² pa	£22.12
Programme:	
Start on Site:	9 December 2015
New Facility Complete:	16 July 2018
Hospital Operational	8 October 2018
Expiry Date:	July 2014 (30 years from construction completion)

1. PROJECT DETAILS

1.1. Contract Structure

We reproduce below the contract structure as illustrated by The Hospital Company in an earlier submission, which helpfully outlines all the key components of the project.



1.2. Description of Scheme

Functional Content

Department Functional	Content
Emergency	Initial assessment areas, Minors, Majors, Children's, Resuscitation and 2 plain film x-ray
Inpatients	14 generic 32 bed wards (including 14 Coronary Care Beds), 96 Adult Assessment Beds, 56 children's beds, 30 level 2 / 3 Critical Care beds
Maternity Delivery Suite 2 theatres, delivery suite, birth centre	Delivery Suite 2 theatres, delivery suite, birth centre
Neonatal	36 cots
Operating Theatres	11 theatres, central admissions area and recovery

Outpatients	Bespoke Antenatal Clinic (including ultrasound), bespoke Paediatric Clinic and Urodynamics
Interventional Cardiology	2 cardiology catheterisation laboratories and support accommodation including day case area
Imaging	2 CT and MRI scanners, 2 plain film, 5 Ultra sound, interventional radiology suite, 4 gamma cameras and radio-pharmacy
Clinical Support	Therapy Suites (including physiotherapy) Pathology Essential Laboratory, Pharmacy, Endoscopy, Medical Day Case Unit including Sickle Cell and Thalassemia, Cardiac Diagnostics, Cardiac Rehabilitation, Neurophysiology, Respiratory Physiology, Mortuary (No PM facilities), Medical Illustration\
Administration / Non Clinical support	Multifaith Centre, Clinical / Corporate Administration, Education and Training, Academic Research, Medical Engineering, Facilities, Energy Centre, Relatives Overnight Stay

1.3. FM Services

Services – hard FM (no soft FM)

- General Services
- Helpdesk Services
- Maintenance
- Lifecycle
- Unprogrammed Maintenance
- Equipment
- Energy & Utilities Management
- Pest Control
- Grounds Maintenance

2. KEY PARTIES

2.1. Introduction

Questionnaires were issued to each of the key parties of the construction and service delivery teams to enable us to undertake an assessment of their capability for the project. Within this section of the report, we highlight the key details of each party and then comment on whether we consider them to have the capacity and capability to undertake the works and services.

2.2. Construction Contractor

2.2.1. Introduction

Project Co will enter into a Construction Contract with Carillion Construction Limited.

Name of Company	Carillion Construction Limited (subsidiary of - Carillion plc)		
Principal Service Provided	Construction contractor		
Key Personnel for this project	Richard Molloy – Construction Director Ian Simmonds – Commercial Director Rhydian Morgan – Design Director		
Principal Bank	Royal Bank of Scotland		
PI cover	£10m was included at Royal Liverpool. [to be finalised - £10m will be minimum requirement]		
Turnover		Overall	Similar Schemes
	2014	£1,084.8m	£156m
	2013	£1,059.6m	£106m
	2012	£1,281.8m	£154m
Total staff	2014	5240	

	2013 5423 2012 3217 (Figures include for Management and Operational staff)
Relevant Experience	<ul style="list-style-type: none"> - Southmead Hospital, Bristol (PFI) - Royal Liverpool University Hospital (PFI) - New Oakville Hospital, Canada (PFI) - South Bristol Community Hospital, (PFI) - Al Jalila Children's Hospital, Dubai

Carillion has undertaken a number of similar healthcare schemes (procured through PFI/PF2/PPP) throughout the UK and worldwide. Southmead, Liverpool and Oakville Hospitals are particularly relevant as the scopes of works are much the same as at the new MMH.

2.3. Architect

2.3.1. Introduction

Carillion have appointed HKS Architects Limited to undertake the role of Managing Architect on the scheme with Sonnemann Toon Architects as clinical design lead and Edward Williams Ltd as Architectural 'champion' in the team. NBBJ is acting as a sub-consultant to Ryder Architecture.

Name of Company	HKS Architects Limited HKS, Inc.(parent company)
Principal Service Provided	Managing Architect
Key Personnel for this project	Paul Sawyers – Project Director Laura Massey - Architect
Principal Bank	JP Morgan Chase
PI cover	£20m – cover expires 31 January 2016

Turnover	Overall		Similar Schemes
	2014	£6,680,000	£2,890,000
	2013	£5,630,000	£1,870,000
	2012	£3,362,000	£375,000
Total staff	2014	30 (suitable resources can be pulled from a total of 925 staff over 27 offices worldwide)	
Relevant Experience	<ul style="list-style-type: none">- Royal Melbourne Children’s Hospital (PFI)- Royal Liverpool University Hospital (PFI)- University of North Staffordshire (PFI)- Salford Royal Hospital, (PFI)		

Name of Company	Sonnemann Toon Architects LLP		
Principal Service Provided	Clinical Design Lead		
Key Personnel for this project	Cressida Toon – Clinical Planning Lead Agata Zamasz – Healthcare Architect		
Principal Bank	HSBC		
PI cover	£5m – cover expires 16 June 2016		
Turnover	Overall		
	2014	£893,000	
	2013	£1,318,340	
	2012	£1,133,390	
Total staff	2014	22	
Relevant Experience	- City of Coventry Health Centre		

	<ul style="list-style-type: none"> - London Hospitals Refurbishment Programme (Wellington Hospital, Princess Grace Hospital, London Bridge Hospital, Lister Hospital, Harley Street Clinic, Portland Hospital & HCA Laboratories) - Spire Healthcare, UK Refurbishment Programme
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Name of Company	Edward Williams Architects Limited		
Principal Service Provided	Architect		
Key Personnel for this project	Edward Williams – Architectural Lead Laura Carrara-Cagni – Director (Architectural Design)		
Principal Bank	HSBC		
PI cover	£0.25m – cover expires 15th April 2016, currently arranging extension of cover for larger projects. Cover note has been forwarded.		
Turnover	Year	Overall	Similar Schemes
	2014	£666k	£560k
	2013	£343k	£295k
	2012	£265k	£200k
Total staff	Partner	3	
	Senior Manager	4	
	Manager	1	
	Other (Architects)	5	

	Includes founding Partner (Edward Williams), available for this project for the majority of his time along with a senior manager and appropriate architectural staff.
Relevant Experience	<p>Experience includes large and complex healthcare, examples:</p> <ol style="list-style-type: none"> 1. UCLH Phase 4 and Proton Beam Therapy 2. UCLH Phase 3 Macmillan Cancer Centre 3. Diagnostic Centre Ulaanbaatar, Mongolia 4. Whitechapel Vision Chemistry Laboratories, Princeton University, New Jersey, USA 5. Welcome Collection refurbishment, The Welcome Trust

We have no concerns with the capability of HKS Architects, Sonnemann Toon Architects and Edward Williams to be able to fulfil their obligations as Architects on the MMH scheme.

2.4. M&E Services Engineer

2.4.1. Introduction

Carillion appointed NG Bailey & Aecom Ltd to undertake the role of Services Engineer's on the scheme.

Name of Company	NG Bailey Limited (part of NG Bailey Group Limited)
Principal Service Provided	M&E Management Contractor, IT Services and Offsite Fabrication
Key Personnel for this project	Paul Aulton – Pre-Contract Director Stuart Gibson – Commercial Director Gwyn Jones – Bid Manager
Principal Bank	HSBC Bank PLC
PI cover	£ 5m – cover expires 27 February 16

	(cover note forwarded)		
Turnover		Overall	Similar Schemes
	2014	£380 m	£ 32.4 m
	2013	£422 m	£ 36.5 m
	2012	£459 m	£ 40.7 m
Total staff	2014	1551	
	2013	1670	
	2012	1806	
Relevant Experience	<ul style="list-style-type: none">- St Helens & Whinston Hospitals (PFI)- Aberdeen Royal Infirmary, Matthew Hay Building (PFI)- Birmingham Gateway New Street Station (PFI)- ESSA Academy, Bolton (PFI)		

Name of Company	AECOM Ltd		
Principal Service Provided	M&E Designer		
Key Personnel for this project	David Buick – Project Manager Gordon Smith – Project Director Richard Anderton – Mechanical Lead		
Principal Bank	Bank of America		
PI cover	<ul style="list-style-type: none">• GBP 10,000,000• Expires 1 April 2016		
Turnover		Overall	Similar Schemes
		(Building Engineering)	
		£000	
	2014:	218,077	5,300
	2013:	172,554	4,100

	2012:	153,871	3,600
Total staff	2014	147	
Relevant Experience	<ul style="list-style-type: none"> - Royal Liverpool University Hospital (PFI) - Central Nottingham Modernisation of Acute Services (MAS) Hospital - Royal Edinburgh Campus - Salford Shift (PFI) 		

We have no concerns with the capability of NG Bailey & Aecom Ltd being able to fulfil their obligations as Services Engineer on the MMH scheme.

2.5. Civil and Structural Engineer

2.5.1. Introduction

Carillion appointed Curtins Consulting Ltd to undertake the role of Civil and Structural Engineer on the scheme.

Name of Company	Curtins Consulting Ltd Wholly owned subsidiary of Curtins Group Ltd	
Principal Service Provided	Structural and Civils design	
Key Personnel for this project	<p>John Caine -Executive Director</p> <p>Shad Khan -Technical Director</p> <p>Mike Kershaw -Infrastructure Consultant</p> <p>Suleyman Ekingen -Project Engineer</p> <p>James Harrison -Project Engineer</p> <p>Tom Leake -Infrastructure Lead</p>	
Principal Bank	HSBC	
PI cover	£10m (£20m cover being procured)	

Turnover	Overall 2014 £19,380k 2013 £15,551k 2012 £12,377k
Total staff	2014 56
Relevant Experience	<ul style="list-style-type: none"> - Saracen Street Health Centre, Glasgow (PPP) - Huddersfield Royal Infirmary (PFI) - Midlands Schools (with Carillion) (PF2) - Perth & Kinross Campuses (PPP)

We have no concerns with the capability of Curtin Consulting being able to fulfil their obligations as Services Engineer on the MMH scheme.

2.6. FM Service Provider

2.6.1. Introduction

Project Co will enter into the Service Contract with Carillion (AMBS) Limited.

Name of Company	Carillion (AMBS) Limited (subsidiary of Carillion Plc)
Principal Service Provided	Facilities Management Service Provider
Key Personnel for this project	Jon Chester – Bid Director Graham Williams – Bid Manager Gary Payton – Head of Service Solutions
Principal Bank	Royal Bank of Scotland

PI cover	In respect of the services phase there is not usually a requirement on the service provider to have such cover in place. If there is this would also be picked up under the services sub-contract.		
Turnover		*Overall	**Similar Schemes
	2014	£4.1bn	£180,928,000
	2013	£4.1bn	£162,690,000
	2012	£4.4bn	£158,663,000
	*Carillion plc Turnover		
	** Carillion Services Health Sector Turnover		
Total staff	2014	17,099	
	2013	16,057	
	2012	17,028	
Relevant Experience	As an example, Carillion delivers FM services at the following UK Hospitals - Darent valley - Queen Alexandra Hospital, Portsmouth - St Barts and Royal London Hospitals - John Radcliffe Hospital, Oxford - James Cook Hospital, Middlesbrough - Nottingham City Hospital - Queens Medical Centre, Nottingham - Great Western Hospital, Swindon - Southmead Hospital, Bristol - Royal Liverpool University Hospital		

Carillion currently provide Facilities Management Services to a number of large UK PFI procured Hospitals. We are confident that Carillion are capable to deliver this service for the MMH scheme.

3. DESIGN AND ENGINEERING

3.1. Design Review

3.1.1. Trust Construction Requirements

Introduction

Schedule 8 Part 3 of the Project Agreement contains the “the technical specifications and identifies the requirements for design, construction and technical commissioning of the acute Hospital to be provided by Project Co” often referred to as the Trust Construction Requirements (TCRs). This document also to be read along with the Functional Brief and the PPDDs (commented on below).

Project Co’s general obligations are clearly identified: “full responsibility for the design and construction of the Project including, but not limited to, the design, selection and performance of all building elements, services and finishes to meet any criteria described in the specifications or other documentation issued for tender purposes either taken individually or collectively”

Our review indicates that the specification provided is normal for a facility as being anticipated here. There are no aspects we consider unusually onerous and we are satisfied that the Bidder will be able to address the requirements, subject to development of the detailed design and agreeing any derogations with the Trust – which we consider later in this report.

We provide a summary of the document below, along with any particular observations we consider relevant from the perspective of our technical due diligence.

Compliance

A normal range of compliance requirements has been outlined. A whole range of standard elements have been listed including:

- Planning Regulations
- Building Regulations including Local Authority and Trust Fire Safety Advisor requirements
- Health and Safety at Work Act and associated regulations

- CDM Regulations 2007
- Health and Safety Executive Guidance
- Environmental Protection Act
- Equality Act 2010

A range of standard Acts, regulations and codes for different elements of design have been listed, including the design requiring to comply with HTM and HBN guidance.

Health Technical Memoranda (HTMs) give comprehensive advice and guidance on the design, installation and operation of specialised building and engineering technology used in the delivery of healthcare; and

Health Building Notes (HBNs) give best practice guidance on the design and planning of new healthcare buildings and on the adaptation/extension of existing facilities.

The Bidder has provided a range of derogations, which we consider later in this report.

Flexibility

We note reference to “a strategy for dealing with future changes in both medical practice and in technology” and “the removal and/or Installation of primary medical equipment such as imaging equipment that will need to be replaced over the life of the Hospital”. This is a standard requirement and should pose no issue for the Bidder. Initial discussions indicate that they have allowed for flexibility around major replacement of plant and equipment, including major clinical equipment.

Environmental Strategy

Standard environmental strategy requirements have been identified as below, to include, but not limited to:

- Prudent environmental management;
- Consumption of raw material;
- Minimising consumption of energy;
- Environmentally sustainable design and material selection;

- Recycling;
- Building Management System and metering;
- ISO 14001;
- BREEAM New Construction 2011 - Healthcare Excellent Rating; and
- Developing technologies.

Resilience

A key area for any Funder is 'resilience' to mitigate the risk of failure and resultant deductions. Schedule 8 Part 3, requires that bidders meet HBN 00-07 "Planning for a resilient healthcare estate". System configurations shall achieve N+1 redundancy where required, i.e. "have at least one independent back up component to ensure system continuity and functionality in the event of system or component failure."

Design Life Expectancy

A key feature of any PF2, or similar procurement, is the development of a design that has sufficient design life in its various components. Important for the on-going functionality of the building throughout the concessions and for delivering a compliant facility that can be properly handed back at expiry.

The TRCs require that, at the end of the Project Agreement, all elements and systems shall, as a minimum, be in Estatecode Condition B with a minimum residual life of 5 years. This is a standard and well recognised requirement, and should not be unnecessarily onerous on Prot Co.

Estatecode Condition B relates to a document published in 2001, entitled "Estatecode, Essential Guidance on Estates and Facilities Management." Condition B is defined as "sound, operationally safe and exhibits only minor deterioration", and can be supported by a 'six facet' review across (1) the building, (2) mechanical systems, and (3) electrical systems. The six facets are:

- Physical condition;
- Functional suitability;
- Space utilisation;
- Quality;
- Statutory and non-statutory requirements (including DDA [now Equality Act]); and

- Environmental management

The TRCs state that “Project Co will, in any event, be required to demonstrate that the design life proposed for any element is achievable”, with reference to the following table, which we consider to be achievable.

Element	Minimum Design Life
Structure, including substructure	70 years
Floor structure	70 years
Roof structure	70 years
External walls	45 years
External openings	25 years
External wall finishes	25 years
Roof coverings	30 years
External hard surfaces	Not less than 20 years to first major maintenance
Internal partitions	30 years
Doors	15 years
Internal finishes	15 years
Internal fixtures and fittings	15 years

Equipment Item	Life in Years
Boiler Plant	15-30 years
Refrigeration Hospital	15-20 years
Ductwork Systems	15-35 years
Fans	10-25 years
Air Condition Terminal Units	10-30 years
Heating Terminal Units	10-25 years
Pipework Systems	10-45 years
Electrical Distribution	20-30 years
Generating Hospital	15-30 years
Lifts	20-40 years

Operational and Maintenance Manuals, Training

Standard requirements appear to be outlined for the requirement to develop detailed Operational and Maintenance (O&M) Manuals. The TCRs give requirement for a Building Manual for the Trust, which is to comprise, but not limited to the following, which will also effectively provide the relevant information for Project Co's own O&M Manual requirements. This is a key area for the Funders as it is important that the long term management of the facility is properly supported and indicates.

- Health and safety file
- As built information
- Technical commissioning results
- Building maintenance manuals
- Operating and maintenance manuals
- Commissioning and decanting master-plans
- Safety condition statements
- Compliance with statutory requirement statements
- Service Provider statements
- Certificates of Practical Completion
- Compliances with Regulatory Reform (Fire Safety) Order 2005
- Equipment schedules
- Building log books
- Emergency information
- Other information required by the Trust.

Control of Infection

Standard requirement cross referring to the Functional Brief and PPDDs, and with reference to HBN 00-09 "Infection Control in the Built Environment".

Fire Safety

Issues relating to fire are a key design and maintenance issue and are well understood in the industry. Reference is made to the Building Regulations, regulatory requirements, (Fire Safety)

Order 2005 and HTM05, the latter being a key reference point also for the management and maintenance of the built facility.

We note reference to sprinkler system, which has been brought into the project by Carillion [detailed design development on-going].

Energy

We note the need for achievement of 42 GJ/100m³ pa, and have noted that we are satisfied that that Project Co appear to have appropriately considered the target with supporting energy model. The associated risk generally passes through to construction from Project Co. The Bidder has estimated the baseline energy consumption of the proposed hospital to be c. 33,570 MWh per annum. This equates to about 39.3 GJ/100m³.

Sustainability

Project Co is to “achieve a BREEAM 2011 Healthcare 'Excellent' score under ENE01 for the design and build of the Facilities and are required to demonstrate compliance.” We are satisfied, that Project Co appears to have developed their proposal to achieve the requirements.

Performance Specifications

A whole range of general requirements for every element of the facility have been considered. We summarise these below and make comment where we consider relevant. There are no particular areas of concern.

Architectural Requirements

- External Envelope
- Roofing and Rainwater Products
- External Walls
- Windows – we note that reference is made to mechanical ventilation as preference. We understand that the Bidder has taken that route, without any natural ventilation.
- External Doors
- Internal Environment – general approach to internal layout design considerations.

- Ceilings
- Internal Walls – includes requirements for fire compartmentalisation, fixings and corridor widths
- Acoustics – testing and performance is a key area, will need close consideration by Independent Tester
- Wall Finishes
- Internal Doorsets – note re fitted with delayed actions closers and vision panels. Door types for different departments identified.
- Internal Glazed Windows
- Ironmongery
- Fixtures and Fittings
- Wayfinding and Signage
- Protection – this requires protection, including crash rails, protection rails, corner guards and end capping pieces. A table of protection requirements for different types of space has also been illustrated.
- Radiation Protection – radiation protection strategy is to be given to the Trust for approval and by their Radiation Protection Advisor.
- Art Strategy – refer comment on Functional Brief
- Flooring
- Expansion Strategy and Design Adaptability – general strategy outlined to be evidenced by Bidder.
- Staircase Ramps and Balustrades – note re firefighting access, smoke control, and dry or wet riser provision.

Engineering Requirements

- Engineering Growth and Flexibility – we note reference to capacity plus 25% to allow for growth and for incoming site services.
- Site Security Systems – integrated, e.g. including CCTV, fire alarms, access control, panic, baby monitoring, etc)
- Access Control - to restrict and control access to controlled areas identified, including access cards. Note hospital 'lockdown' as PPDD01.
- CCTV – 24/7 digital system. Resolution, recording, presence detection, etc as required.
- Panic Alarms
- Intruder Detection Alarm

- Electronic Baby Monitoring
- Air Quality
- Acoustics, Noise Control and Vibration
- Thermal Comfort – refer Functional Brief
- New Utility Connections and Energy Supply Infrastructure – [note diesel driven low voltage standby generation.]
- Site Services Network – note metering requirement
- Building Management System – digital BMS required with wide ranging digital control systems, access and report facility.
- Electrical Small Power
- Special Medical Locations – note requirements for uninterruptible power supplies.
- Hot Water
- Cold Water and Drainage Systems
- Above Ground Drainage
- Surface Water Drainage/Rainwater Harvesting
- Medical Gases
- Heating, Ventilation and Air Conditioning
- Ventilation Systems
- Steam Generation for Humidification
- Heating Water Services and Distribution
- Cooling Installations
- Artificial Lighting Systems – LEDs encouraged.
- Emergency Lighting / Standby Lighting
- Communications – including fixed intercommunication devices, public access systems and induction loops.
- Transportation Systems - including lifts and escalators for various purposes
- Fire Alarms – including zoning
- Protection Systems – including lightning and earthing.
- Pneumatic Air Tube Transport System – area of particular care for design and maintenance
- Patient Bedhead Services – electrical services, medical gases and communication.
- Alarm and Nurse Call Systems (Staff Call System)
- Automated Guided Vehicles (AGVs) –these may be considered. Systems to allow for potential interface. AGVs not included in the base bid.

Landscape Requirements

- External Works
- Hard and Soft Landscaping
- External Signs, fences, courtyards and external lighting.

Structural Requirements

- Site Investigation – whilst the Trust are clearing and remediating the site, it is important to note that “Project Co shall undertake their own, independent review of any existing information or data made available or obtained by them to confirm its adequacy or otherwise. It is Project Co’s responsibility to obtain relevant, suitable and adequate ground investigation data necessary for them to discharge their duties under the Project Agreement, including conducting their own ground investigation surveys”. [Initial discussions with the Bidder indicates that they are satisfied that as things are progressing, this is feasible position. Suite of surveys awaited.]
- Design Basis
- Structural Design
- Future Modification
- Foundations
- Substructure
- Superstructure
- Access Roads, Parking Loading and Unloading Areas
- Below Ground Drainage
- Geotechnical Works

Contract Requirements

A standard set of contract requirements have been outlined relating to the following matters, similar to standard preliminary requirements, which we are satisfied are normal and as expected for such a project, including:

- The Development Site – security , dust screening, waste, prohibited materials, advertising, roads, hoardings, public protection, cranes, access to the site, permits, storage, etc.
- The Works – stability, explosives, noise, working hours, pollution, records, technical literature.

- Fire, Health & Safety – fire, precautions, Trust safety policy and control of hazardous substances.
- Existing utilities and surrounds – services and conduits, tress/hedges, shrubs etc, existing features/structures.
- Services and Supplies – telephones, protection, obligations and restrictions, temperature heating and ventilation of works, use of permanent electrical supply, permit to work system.

Technical Commissioning

We have discussed elsewhere the importance of ensuring the testing and commissioning is robust, detailed and the programme specifically identified. In the TCRs, reference is also mentioned in relation to importance of the role of the Independent Tester and their obligations in relation to completion certification.

We note the reference for the inclusions of 'soak test' period. "Due to the large scale of the Project and to assist in providing a soft landing a suitable soak test period shall be allocated within the Project programme to allow the operation of the mechanical and electrical services systems to ensure the correct operation of all systems at handover. This shall be included as a separate element after the satisfactory completion of testing and commissioning works"

Appendix A – Finishes Matrix

A standard finishes matrix is appended to the TCRs which provides a good reference point in relation to the finishes that will be required throughout the facility:

- Wall finishes;
- Floor finishes;
- Floor patterns;
- Skirting types;
- Ceiling types;
- Ceiling finishes; and
- Internal doors and ironmongery.

This then is cross referred to using a matrix for "Exemplar Generic Rooms", for example a range of rooms in the following categories or departments:

- Single Bedroom;
- Multi Bedroom;
- Theatre Suite;
- Clinic Rooms;
- Utilities;
- Reception and Control;
- Sanitary and Welfare;
- Storage;
- Administration; and
- Facilities Management.

Also, looking at External Finishes, for example:

- Entrances;
- North, East, South and West Facades;
- Courtyards; and
- Landscaping.

Information Management and Technology (IM&T) Infrastructure Requirements

Appendix B of the TRCs (Sched 8 Part 3) outlines the general requirements in relation to IM&T. We are satisfied that this represents standard project positions in relation to 'passive' IM&T, e.g. structured cabling and associate routers. We note the requirements for wifi availability, which is a common feature for such projects and should not present any particular issues for Project Co deliver as required.

"The Network includes all the necessary cabling, optic fibre, power distribution within cabinets, cabinets, terminators, patch panels, patch leads, fly leads and containment needed to meet the IM&T Infrastructure Requirements. The Network is required for the IM&T Active Infrastructure Area and the Wireless Coverage Area."

Scope: "As part of the Network, Project Co will make available to the Trust 11,600 Category 6a outlets in the IM&T Active Infrastructure Area."

"Project Co will provide the Network to enable the Network to support Trust services including (but not limited to):

- (a) on-site data, voice, video and mobile communication;
- (b) interfaces to support connectivity to the public mobile telephony network;
- (c) access to external (wide area) paging;
- (d) patient entertainment;
- (e) bleeps providing paging in the Bleep Coverage Area;
- (f) monitoring and alarm communications;
- (g) RFID and other location based services over 802.11;
- (h) clinical applications and services including (but not exclusively) PACS, EPR, Digital Radiology and Imaging including cardiology, Document Management and Neurophysiology; and
- (i) Building Management Systems, retail facilities, CCTV, car parking, access control etc.

The wireless requirement is to be secure and encrypted, and is stated as to “be installed and available throughout the Wireless Coverage Area to fully support the services in [13.3.3] in accordance with (as a minimum) all relevant ... standards and advisory notices and in accordance Good Industry Practice...”

Resilience: the TCRs specifically set out the necessary resilience: “Every wiring closet or copper cabling distribution point provided as part of the Network shall be fed (unless otherwise agreed by the Trusts) by optic fibres from a minimum of two network core locations and optic fibre will be routed diversely in line with Good Industry Practice ... The Network ‘core’ which comprises main switches, uplinks to access layers, and connections to the PSTN will be designed to remove any single point of failure.”

Design

There are two key documents, along with the Schedule of Accommodation, that drive the Bidder’s design development:

- (1) The Functional Brief, Appendix A of the ITPD, details the following and is the basis of the Bidder’s design development:
 - Model of care, the main functional areas of the hospital and the required adjacencies;
 - Overview of the Design Vision to be delivered;
 - Site masterplan strategic context and requirements;
 - Access and circulation requirements for the site and the hospital;

- Overview of the principles of design (Common Rules) required to underpin design development; and
 - Overview of the requirements for the layout and content of generic / exemplar rooms.
- (2) Operational Policies, and Planning Policy and Design Descriptions (PPDDs), developed by the Trust, for both clinical and non-clinical services. The PPDDs include how services need to be arranged as part of an overall design, for example key adjacencies and inter-departmental relationships together with an impact assessment in terms of infrastructure, staffing issues, capacity and technology. The PPDDs are the Output Specifications for every individual department, and our in Appendix B of the ITPD Vol 2:

01	Emergency Department
02	Inpatient – Generic
02b	Inpatient – Adult Assessment Unit
03	Integrated Critical Care Unit
04	Maternity Delivery Suite
05	Neo Natal Unit
06	Operating Theatres
07	Medical Daycase Procedure Unit
08	Endoscopy
09	Cardiac Imaging Therapy
10	Not used
11	Imaging Department
12	Not used
13	Not used
14	Outpatients Department
15	Medical Illustration
16	Cardiology, Neurophysiology and Respiratory Physiology
17	Pathology
18	Pharmacy
19	Administration
20	Multi Faith Centre
21	Academic Research
22	Education and Training
23	Not used

24	Facilities Management (Trust managed services)
25	Not used
26	Not Used
27	Medical Engineering
28	Not used
29	Inpatients – Paediatrics
30	Mortuary
32	Main Entrance and Concourse
33	Neighbourhood Hubs
34	Not Used
35	Energy Centre Plant

Each PPDD broadly follows the following structure, though with variations to this when appropriate. We are satisfied that these appear to indicate robust requirements to support the Bidder's development of the design, understanding usage, management of the environment/space conditions and facilities management support:

- Philosophy of Service;
- Scope of Planning Policy;
- Staffing;
- Key Relationships;
- Planning and Design Principles;
- Equipment;
- Proposed Accommodation;
- Schedule of Accommodation; and
- Glossary and Definitions.

Sustainability

The Bidder is required to demonstrate sustainable proposals both in terms of the completed scheme and during the construction process. These to include the use of manufactured materials, recycled materials and the embodied energy held within these materials. Throughout the construction programme, under the requirements of BREEAM Healthcare, the Bidder is to demonstrate sustainable transport options for construction traffic and illustrate suitable disposal

method for both site waste and consequential waste generated by the development. This should be feasible for the Bidder.

A BREEAM Healthcare 'Excellent' rating is a fundamental Trust requirement. Initial discussion with Bidder indicates that this will be achievable.

Energy

The Trust requires Project Co to deliver a solution capable of achieving an energy consumption not greater than 42GJ/100m³ whilst achieving a BREEAM Excellent score under ENE01. Initial discussions with the Bidder indicates that they are designing and developing their proposals to achieve this.

Information Management and Technology Vision

The Trust has a strategy for a 'Digital Hospital' which underpins the requirement for the future patient care to be technology based. The Bidder needs to "provide a platform on which technology can be developed and utilised in the future without the need for physical alterations to the facility."

Arts Strategy

The Trust requires its Art Strategy, to be incorporated into the architectural design of the hospital and environs, which will also form the basis of the wayfinding strategy, producing an integrated art solution.

An Arts Co-ordinator will be appointed during the final year of the Construction Phase of the project to ensure a structured approach to delivery of the Arts Strategy. The Arts Co-ordinator will help develop and deliver the Commissioning Plan in relation to the:

- Commissioning and developing of art in time for the hospital opening;
- Installation of art prior to opening; and
- Launch of the Arts Programme post opening.

Commissioning

Schedule 12 of the Project Agreement sets out the responsibilities of Project Co and the Trust in developing and executing the Commissioning Programme. This is a key area of the project that a Funder will want to be satisfied has been properly considered and protected to mitigate the risk of post completion failure.

The Bidder is required to demonstrate how their design proposals can be commissioned to execute the Trust's Occupation Plan which is to be completed within twelve weeks of practical completion:

- To achieve the occupation programme, the Trust will require beneficial access to undertake works identified in Schedules 12 and 13 as being the responsibility of the Trust;
- The transfer of clinical services within each phase will be as rapid as possible with the aim of completing each of these phases within 48 hours; and
- Within the Commissioning Programme, the level of detail should identify the Completion Criteria, Completion Tests and Activities as detailed in Schedule 12.

Equipment

Schedule 13 of the Project Agreement sets out the equipment procurement, transfer, installation, commissioning, maintenance and lifecycle responsibilities of Project Co and the Trust, as well as requirements for beneficial access.

Equipment for MMH may be purchased new by the Trust, procured through an MES, transferred from other hospital sites or provided by Project Co. The Trust has developed ADB category 1 to 4 equipment groups into an Equipment responsibility Matrix (ERM) to provide a greater degree of clarity as to how equipment is managed within the project. The ERM sets out the responsibility for the procurement, transfer, installation, commissioning, maintaining and life cycling of each category of equipment.

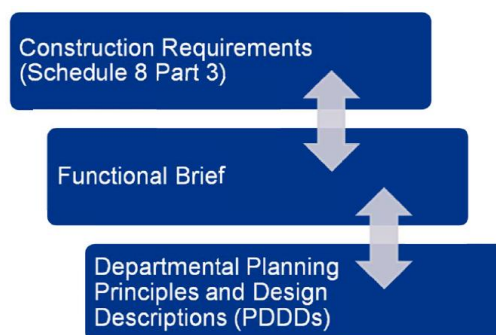
We are satisfied that a normal requirement is anticipated.

Functional Brief

The Functional Brief document is intended to provide the Bidder an understanding of the planning and design requirements for the new hospital. The document covers the following areas:

- Model of care, the main functional areas of the hospital and the required adjacencies.
- Overview of the Design Vision to be delivered.
- Site master plan strategic context and requirements.
- Access and circulation requirements for the site and the hospital.
- Overview of the principles of design (Common Rules) required to underpin the design development.
- Overview of the requirements for the layout and content of the generic/repeatable rooms.

To explain the combination of documents and the place of the Functional Brief, the hierarchy of documents are illustrated in the following diagram:



The functional Brief has the following contents, which we think is helpful to reproduce below to illustrate its breadth.

1 Purpose of the Document

2 Approach

- Model of Care
- Key functional areas and required adjacencies
- Schedule of accommodation
- Specific Exclusions

3 Design Vision

4 Master Plan

- Grove Lane: Strategic Context
- Flexibility & Expansion
- Sustainability

5 Hospital Access & Environment

- Site Access and Circulation
- Access and Egress to the Building
- Whole Hospital Flows
- Emergency Care Access
- Service Access
- Pneumatic Tube System
- Public Spaces
- Use of Natural and Artificial Light
- Environmental Criteria
- Acoustic Criteria

6 Common Rules

- Planning Principles
- Diversity
- Privacy, Dignity and Dementia
- Control of Infection
- Telecom, Data Points and Call System Requirements
- Storage
- Patient and Visitor Welfare Provision
- Staff Welfare
- Security and Safety
- Major Incident
- Fire Precautions
- Wayfinding
- Manual Handling
- Public Art
- Sterile Services
- Facilities Management Services

7 Repeatable and Generic Room Requirements

- Bedrooms Single
- Bedrooms Multi

- Operating Theatre Suite
- Clinic Rooms
- Utilities
- Reception and Control
- Sanitary and Welfare
- Waiting Adult
- Waiting Children
- Storage
- Administration
- Facilities Management
- Store Medical Gas
- Regeneration Kitchen
- Medical gases and associated power supply requirements
- Room Data Sheets
- Departmental Clinical Room Loaded Plans

8 Room Derogations

9 Bedrooms Single

- Bedroom - Adult Acute – Inpatient with en-suite
- Bedroom –Adult Acute – Inpatient with en-suite and Isolation lobby

10 Bedrooms Multi

- Multi Bedroom (4) - Adult Acute – In Patient
- Multi Bed Spaces – Critical Care
- Multi Cot Space (level 2/3) – Neonatal Unit

11 Clinic Rooms

- Consulting Examination – Dual Access
- Consulting Examination – Single Access
- Treatment Room

12 Utilities

- Clean Utility
- Dirty Utility – with macerator

13 Sanitary and Welfare

- Lobby – Isolation Rooms
- En-suite Shower / Toilet Partial Assisted
- Departmental Domestic Services Room

We provide some observations on aspects below.

Functional Areas and Adjacencies

The key functional areas comprising the new hospital and the required adjacencies to facilitate effective and efficient functioning of the facility are listed in Table 1 below.

	Emergency Department	Inpatient Beds - Surgical	Inpatient Beds - Medical	Inpatient Beds - Maternity	ICCU	Maternity delivery Suite	Neonatal care Unit	Operating Theatres	Medical Day Case	Endoscopy	Paediatric Inpatients	Cardiac Imaging and Therapy	Imaging	Acute Medical Assessment Unit	Surgical Assessment	Cardio Diagnostics Neuro & Resp Physiology	Pathology	Pharmacy	Mortuary	OPD antenatal	OPD Paediatrics	OPD specialist surgical	24/7 entrance not via ED or main entrance	Main Entrance /Concourse	FM R&D	Medical Engineering
Legend:																										
Essential Relationship	■																									
Desirable Relationship	■																									
Emergency Department																										
Inpatient Beds - Surgical	MSK																									
Inpatient Beds - Medical	*1																									
Inpatient Beds - Maternity																										
ICCU																										
Maternity delivery Suite																										
Neonatal care Unit																										
Operating Theatres																										
Medical Day Case																										
Endoscopy																										
Paediatric Inpatients																										
Cardiac Imaging and Therapy																										
Imaging																										
Acute Medical Assessment Unit																										
Surgical Assessment																										
Cardio Diagnostics Neuro & Resp Physiology																										
Pathology																										
Pharmacy																										
Mortuary																										
OPD antenatal																										
OPD Paediatrics																										
OPD specialist surgical																										
24/7 entrance not via ED or main entrance																										
Main Entrance /Concourse																										
FM R&D																										
Medical Engineering																										
Notes:																										
MSK - direct admission from ED for fractured neck of femur patients																										
*1 Stroke; Cardiology; Clinical Haematology - direct admissions from ED																										
*2 vertical adjacency with direct route																										
*3 discrete route as direct as possible																										

Materials

The Trust wishes to use materials and construction techniques that are classified as “A-rated” in the “Green Guide to Specification”. Use of recycled ‘aggregate’ materials (crushed masonry for example) for use in foundations and under road surfaces is also to be incorporated where possible and where such materials can be found within a sensible distance for transport. This should not present any problems for the Bidder.

Infection Prevention and Control

The design, layout and environment must be versatile to ensure compliance with infection prevention and control standards and permit flexibility with design to provide optimal operational usage. The design should be conducive to the management of outbreaks to ensure containment to reduce risk of transmission whilst maintain optimum patient care. This is a key component for any hospital and should not present any problems for the Bidder.

External Entrances

All external entrances should meet the requirements of Equality Act 2010 and Building Regulations Approved Document M, and require draught lobbies and protection from weather. The Bidder has to consider warm air curtains at main access points to the internal environs. In addition, two nr large diameter (4800mm) revolving doors, meeting the requirements of Equality Act 2010, are anticipated at the main entrance. All external entrances must be obvious, and uncluttered to maximise pedestrian flow and avoid congestion at the entrance. The congregation of people, waste material or deliveries at the entrances to the hospital must be discouraged. This is a relatively clear requirements and straight forward for the Bidder to incorporate.

Access Control Systems

The Trust requires an Access Control System. The system should ensure that only authorised persons enter or leave the premises and that they do so under controlled conditions to preserve security. This would include the Lock Down provision. The access control system should use a means of identifying an individual and then refer to a database to check the times and doors through which access is permitted and subsequently recorded. Having identified and accepted individuals the system should trigger the release of the door lock. Staff access will be gained via proximity reader access control system and access by non-authorised persons to controlled areas should be via remote door releases activated from staff bases which include a call push, CCTV identification and a voice audio link. The system should be integrated with other security systems within the Security Base. Access to service and other non-public lifts should be controlled by utilising the staff identification system. This is a relatively clear requirement and will be straight for the Bidder to incorporate.

Pneumatic Tube System

The Trust requires that the design solution provide the following functionality or equivalent in respect of a pneumatic tube system (150mm diameter), which delivers between specified functional areas. This is a common requirement for modern hospital, and should not present any particular issues for the Bidder, noting that PF2 is hard FM services only.

Artificial Lighting

The Trust require lighting to be as per Sch 8 Pt 3 (in particular 5.20.91 thru 5.20.135) and the Functional Brief (in particular section 5.9, including Table 11). For further specific clarification regarding bed spaces the Trust require compliance with CIBSE LG2 and BSEN 12464 lighting levels for the functions/tasks specified in HTM 08-01 Section 8.

The expected lighting levels are:

1. Circulation Spaces – 100 lux at the floor
2. General Nursing Care/Exam/Treatment – 300 lux minimum over the whole bed space (dimmable)
3. Observation/Night Light – 1-5 lux at the bedhead
4. Observation/Night Watch – 20 lux at the bedhead
5. Circulation Space night light – 5 lux at the floor
6. Examination (In patient) – 1000 lux via mobile exam light
7. Examination (Level 2/3 beds) – 1000 lux fixed examination light
8. Patient Reading – 150 lux at the bedhead

These would appear to be reasonable, and should not pose any difficulty for the Bidder.

Environmental Criteria

The table below sets out the Trust's requirements in respect of the use of ventilation systems and the maximum / minimum temperatures to be achieved for Generic and Repeatable rooms. Details of Bespoke rooms can be found within the individual PPDDs. For details of codes utilised refer to HTM 03-01 Specialist ventilation for healthcare premises: Part A Design & Validation. We are satisfied that these appear to be normal for the Bidder. We note in relation to the need to develop the related Availability Criteria.

Functional Space	Temperature		Minimum ac/hr	Pressure & filtration		Notes in respect of permissible derogations as per Table 13
	min	max				
In-patient Beds – multi bed	20°	25°	10		F7	i
In-patient – single			10	PPVL	H12	
In-patient – single isolation				PPVL	H12	
In-patient – isolation lobby						
Beverage room	18°	25°	2			iii
Food trolley Bay	18°	25°	2	-ve		iii

Environmental Criteria: Notes	
(1)	In line with Manufacturers Recommendations in respect of Temperature limits for equipment
(2)	Pressure regimes shall be in accordance with HTM
(3)	The overall design of the clean rooms must be based upon the principles contained within BS5295 / BS EN ISO 14644-1:1999.
(4)	The design must comply with Medicines and Healthcare Products Agency (MHRA) requirements and ensure the finished unit will be granted a Manufacturers 'Specials' Licence. Where grades of rooms are referred to, this is taken from the Rules and Guidance for Manufacturers 2007 Annex 1 ('Orange Guide').

Environmental Control Criteria:	
i	No derogation of temperatures outside maximum and minimum temperature limits
ii	No derogation of temperatures outside maximum and minimum temperature limits plus a means of close control of +/- 1°C of the selected value anywhere within the stated maximum and minimum temperature limits
iii	Maximum temperature limit not to be exceed by more than 50 hours per annum
iv	Maximum temperature limit not to exceed 2°C above external ambient air temperature (OAT)

In developing the design solution it is essential to comply with the law with regard to discrimination and equality including but not limited to the Equality Act 2010. Guidance can be gained from The Building Regulations 2000 Part M access to and use of buildings and BS 8300: design of buildings and their approaches to meet the needs of disabled people. This should not pose any problems for the Bidder and is standard requirement in modern design.

Control of Infection

The use of design to assist the effective control of infection is essential. The design team's attention is drawn to the publication HBN 00-09 *Infection Control in the Built Environment*, which shall be complied with. This should not pose any problems for the Bidder and is standard requirement in modern healthcare design.

Telecom, Data Points and Call System Requirements

The Trust intends to move towards a single communications network structure for IM&T, telephony, patient and facilities support systems. The network structure will provide diverse routing, resilience and future expansion.

The single communications structure should support other data communications including the following support systems; however, this is not an exhaustive list:

- Nurse call;
- Car park barriers;
- CCTV;
- Swipe access controls;
- Patient information displays;
- Baby tagging;
- Facilities support and monitoring systems; and
- Panic Alarms.

CCTV (Security)

The CCTV system has four purposes:

- To monitor access/egress to buildings, departments and wards for the prevention and detection of crime and to ensure public and staff safety and security;
- To monitor internal departments and areas for the prevention and detection of crime and to ensure public and staff safety and security;
- To monitor the external environs for the prevention and detection of crime and to ensure public and staff safety and security; and
- Traffic management.

The CCTV System, operable 24/7 should be designed in co-ordination with internal/external lighting and landscaping. The system shall achieve both Automatic Number Plate and Facial Recognition with surveillance linked to central control and recorded activity.

The CCTV is to provide 100% coverage of the following areas:

- All public and staff entrances to the building with fixed cameras giving facial views on both entrance and exit;
- All internal circulation routes, corridors, stairs, lift lobbies and concourse with moveable tilt/pan cameras;
- All public and staff entrances to all individual departments with fixed cameras giving facial views on both entrance and exit – these cameras are in addition to those covering the circulation routes.

All areas of external grounds, roads and car parks with moveable tilt/pan cameras plus additional cameras to cover site entrances, bus stops, car park barriers/entrances.

We are satisfied these are standard requirements for such projects and will be deliverable for the Bidder.

Facilities Management (Trust Managed Services)

The detailed specification for each soft FM service is contained within PPDD 24, which is a key reference point to outline the services that the Trust will retain, giving a reference point for the interface with the services that Project Co will deliver. In summary it covers the following areas of service amongst a range of other things which this PPDD outlines. Effectively the Trust retains all soft FM and hotel services to support the delivery of clinical services, including security, catering, portering and patient movement.

- Receipt & Distribution
- Catering
- Waste Management
- Administration
- Externals
- Receipt and Distribution (R&D)
- Security and Observation
- Control of Infection
- Holding Area – Linen (Receipt)
- Holding Area – Linen (Returns)
- Emergency Linen Holding
- Post Room
- Office – Receipt and Distribution
- Soiled Equipment – Holding Bay
- Cleaning
- Catering
- Staff Welfare - Catering
- Ward Services
- Utility - Cleaning
- Portering
- Security
- General Transport

Repeatable and Generic Room Requirements

Here, repeatable and generic room requirements are outlined in general terms and seem reasonably straight for the Bidder to incorporate within their design. It covers the following accommodation:

- Single Bedrooms
- Multi Bedrooms
- Theatre Suites
- Clinic Rooms
- Utilities
- Reception and Control
- Sanitary and Welfare
- Storage
- Administration
- Facilities Management

3.1.2. Architectural Design - Project Co Proposals

We have reviewed the proposed architectural solution proposed by the Carillion led consortium. We provide an overview of the proposed design and comment on key elements below.

General

The design uses a consistent grid throughout, with a restricted palette of clear glass, concrete, aluminium, steel, timber and terracotta. The modern design to deliver a clinical environment also offers the public a range of amenities, including:

- Landscaped grounds;
- Elevated terraces; and
- A fully enclosed Winter Garden.

Each layer steps back and reduces the plan shape “softening the building’s overall appearance and creating interesting and animated facades.” The service and logistics elements of the building are located to the north of the site, away from the main entrance / civic green area and close to the nearby industrial zone, where their more utilitarian character will not look out of place. We reproduce some of the artist impressions provided



Main entrance



Front Elevation



Side elevation

A comprehensive set of drawings has been submitted within the bid, which have been fully modelled at full size in a coordinated BIM model and therefore are coordinated with MEP and civils/structural information is reflected in these drawings.

The comprehensive nature of the drawings ensures every element is modelled and co-ordinated in the BIM model - ensuring that no further development is required at this scale.

There are a variety of external treatments, which all appear to be well understood technologies that should not present any issues in terms of erection, maintenance and life cycle. Furthermore the design clearly demonstrates the logic behind the detailing to the façade which provides a flexible and adaptable design which articulates and follows a clear structural grid approach.

The building has been designed in three layers: a base level that accommodates the car park and facilities management areas; a middle level that contains the main clinical areas and finally a top level containing the wards and a fully enclosed Winter Garden.

The proposal supports adaptable and flexible design and the following principles appear to have been considered within the design:

- Standard square grid throughout the building;

- No major transfer structures
- No down-stand beams around the perimeter edge [RAG A15]
- Standard floor to floor heights on an even 170mm stair riser module
- Standard facade units on a nominal elevational grid of 3.9m(half grid) x 4.08m (standard storey height)
- Repeatable elements
- Limited palette of materials
- The ability to use the sub divisional grids (1/2 bay, ¼ bay and 1/8 bay if required) to allow full internal plan layout flexibility along with the possibility of full panel infills where required.

The facade is designed as a series of repeatable units that are ideal for offsite manufacture. The overall sizes are calibrated to be transportable to site and will be lifted into position on site. The proposal supports the construction programme by:

- Avoiding major transfer structures
- Maximising off site fabrication opportunities
- Giving maximum flexibility for the construction programme

The proposals coordinate with the proposed sustainability strategy and is fully linked to the BREEAM Assessment in terms of materials, thermal performance and glazed areas.

The table below details the materials that will be used for specified areas.

Area	Description
Panels	<ul style="list-style-type: none">- Insitu structural concrete column- Alphonon terracota tiling- Insitu concrete slab – Floor slabs- Floor to ceiling height – 2,750mm
Ward outer facade	<ul style="list-style-type: none">- Natural timber rainscreen panelling with ppc aluminium edge frame- Fixed solar control glazing with ppc aluminium frame- PPC aluminium panel
Ward inner facade	<ul style="list-style-type: none">- Fixed clear double glazed unit with ppc aluminium frame boundry

	<ul style="list-style-type: none"> - Insulation and structural stud system - Vertical timber hit and miss with dark painted sheet behind and ppc aluminium edge frame
Custom Bay	<ul style="list-style-type: none"> - Double glazed unit with ppc aluminium frames - Vertical hit and miss terracotta baguettes with dark painted rear screen and ppc perimeter aluminium edge frame - Recessed aluminium panel
Main Entrance Commercial Facade	<ul style="list-style-type: none"> - Clear shop front double glazing - Full height pivoted shop door clear glass - Fabricated painted mild steel frame - Vertical hit and miss timber elements - Fabricated and painted mild steel frame - Pre-cast or in-situ concrete column - Fairfaced concrete soffit

The internal design proposals help to enhance the natural lighting of lower floors as highlighted in the table below

Area	Advantage
Podium level	Provides several courtyards of varying proportions and depths. This allows natural light to penetrate into the podium level and provides opportunities for landscaping and artwork within
Courtyards	<ul style="list-style-type: none"> - Supply daylight to the podium - Fully landscaped - Provide access routes - Provide possibility of use of ground level including seating, playing and walking.

Internal Materials	Description
Painted Render	Panelised coloured render system to the podium courtyards with potential for a variety of colour options.
ETFE Cushions	Fritted ETFE cushions to winter garden roof, providing light, transparency and views out.

Timber Panelling	A combination on of timber and glazed panels to the main entrance
Painted Steel	Painted steel vertical circulation on cores containing stairs and lifts, acting as beacons in the community and wayfinding devices
Steel Cross Bracing	Steel cross bracing rods to facade bays.
Paving	External grade naturally coloured concrete flag paving to winter garden floor.

In order to prevent damage and to allow an acceptable level of weathering over time, appropriate materials have been selected for the external facade. The external facade of the building is composed of a selection of terracotta, timber, aluminium and glass which will all weather well over time. Timber is proposed to be thermowood which is a specially treated timber product from Scandinavia that comes with a 30 year guarantee.

The design drawings provided show adequate detailing in this regard and demonstrate an appropriate ageing process will occur for all the materials selected.

The maintenance strategy is well coordinated regarding both access and materials. There are access routes provided throughout the building which allows for maintenance of the facade. The external facade of the podium can be accessed via the perimeter access road. The ward facades can be accessed for maintenance in the Winter Garden or on the Winter Garden external terrace. There are additional maintenance access routes for the courtyards at Level 02, Level 03 (to the south east and south west courtyards), and at Level 10 for maintenance access to plant areas.

External lighting will be provided to all entrance areas, car parks, paths and courtyards to suit the architectural requirements of the hospital. The external lighting design will provide a secure environment for both road and pedestrian traffic, whilst endeavouring to see that any nuisance affects on adjacent areas is minimised in accordance with current best practice standards and guidance. The scheme will be designed to complement the architectural design philosophy and all luminaires will be selected to meet the architectural requirements of the building and to respect the sensitivities of the surrounding environment.

The external lighting will be designed in accordance with Chartered Institute of Building Services Engineers (CIBSE) code for external lighting (LG6), and will fulfil the categories of amenity, safety and security. The lighting will be provided to enhance the security of the building with minimised

impact on the surrounding environment and, wherever possible, the design will satisfy the minimum lighting level requirements.

The external lighting design will minimise, as far as practicable, light pollution into sensitive areas of the hospital (e.g. wards) adjoining residential areas and to the natural environment in general.

Recommended illuminance levels will be achieved by selection of particular luminaire, lamp source and optical control. All external lighting, excluding emergency luminaires, will be photo-electric cell and time switch controlled, with manual override from within the Hospital Estates Department. The lighting will be integrated with the landscape.

Room adjacencies have predominantly been led by the clinical brief, the agreed clinical layouts have been reviewed by the wider design team to ensure that key adjacencies in terms of fire safety, acoustics and security comply with Schedule 8 part 3 and also the relevant statutory regulations and guidelines (HTMs/HBNs Building Regulations Approved Documents etc).

The Trust Schedule of Accommodation has been reviewed against HBN standards and identified variations were highlighted and referred to the Trust project team. Following these discussions and clarifications, those areas have been mirrored and are presented within the SoA.

The planned schedule of accommodation for the design mirrors that of the Trust with the exception of the following, which are still in discussion with the Trust:

- Some minor changes to room sizes relating to HBN standard/ exemplars and demonstrates appropriate functionality
- Some areas where consortium wishes to standardise the brief to shape like for like rooms to promote maximum flexibility, without impacting on room functionality
- Areas where for additional spaces to improve patient and staff amenities i.e. welfare provision at ward level and the re-distribution of the neighbourhood hubs to support departments.

The internal design incorporates a simple building grid throughout. Large open spaces including a glazed, five-storey Winter Garden at the heart of the building which will include a restaurant, coffee shops, landscape and seating opportunities.

Material Breakdown:

Area	Flooring	Ceiling	Doors
Car Park - Car Circulation	Exposed Concrete	Exposed Ceiling finished with a height light reflectance	External grade metal
Car Park - Pedestrian Circulation	Painted concrete, monolithic hard wearing, anti slip, high light reflectance, in key wayfinding areas only	Exposed Ceiling finished with a height light reflectance	External grade metal
Car Park - Key Landmark Wayfinding	Painted concrete, monolithic hard wearing, anti slip, high light reflectance, in key wayfinding areas only	White paint to ceiling soffits and columns, in key wayfinding areas only	External grade metal
Winter Garden & Main Entrance	Concrete pavers	ETFE system over painted steel structure	Doors with Overpanels
Primary Public	Large format Porcelain tile flooring	Plank Ceilings with Gypsum Board Soffits	Doors with Overpanels
Link Bridges/Ward Lift Lobbies	External grade paving	Open to Above or Exposed Concrete	Regular Height Doors
Secondary Public	Vinyl Flooring	Plank Ceilings with Gypsum Board Soffits	Regular Height Doors (doors with overpanels to key areas only)
Clinical	Vinyl Flooring	1200 x 600 Grid Ceiling, 600 x 600 Grid Ceiling, plasterboard margins	Regular Height Doors

Specialist Clinical	Vinyl / Anti-static / Slip-resistant Flooring	600 x 600 Grid Ceiling / Plasterboard with aseptic paint	Regular Height Doors / Fully Glazed Doors
Support/FM	Vinyl Flooring	600 x 600 Grid Ceiling	Regular Height Doors
Admin/Non-Clinical	Carpet Flooring	600 x 600 Grid Ceiling	Regular Height Doors

The design responds to the design of corridor spaces in accordance with Trust brief throughout the majority of the design. Details of proposed widths throughout are documented in the corridor width drawings that have been provided. The circulation to each ward varies in width between staff observation points and the inboard bathroom pods, though this leaves the narrowest points less than the stated figure in the corridor matrix, there are frequent passing places along the wards at each of the wider staff work points. This configuration has been subject to a physical mock-up which the trust has viewed and returned comment.

Fire Safety Guidance

The fire safety design has met and in some cases exceeded the requirements of Part B of the Building Regulations 2010 in terms of life safety.

A suitable and robust emergency evacuation plan for each department within the building will be put in place. This is further supported by the provision of a fully addressable fire detection and alarm system throughout the building. Early detection of fire within a hospital environment is vital to protect patients, staff and visitors. The fire alarm detection system has been designed to provide a cost effective system that will address issues such as false alarms and malicious activation.

On the basis that the recommendations made within the guidance documents are followed, it is confirmed that the requirements of the Building Regulations 2010 will be fulfilled; and an adequate level of fire safety will be provided throughout the premises.

Fire Detection & Alarm System: a fully addressable analogue type L1 category system meeting the recommendations of HTM 05-03 Part B, BS 5839 – 1 and the relevant parts of BS EN 54 will be provided.

Automatic Fire Suppression System: due to the height of the building exceeding 30m, HTM 05-02 recommends a life safety system is installed in accordance with BS EN 12845. The proposed system is a life safety system and therefore the additional requirements in Annex F of BS EN 12845 will also be applicable.

The general hazard classification for hospitals in BS EN 12845 is OH1 which must be confirmed by the appointed sprinkler specialist/sprinkler contractor prior to installation.

Emergency Lighting & Exit Signage

Emergency Lighting: the emergency lighting that will be installed will follow the recommendations of BS 5266, HTM 06-01 and CIBSE guide "Lighting guide LG2: hospitals and healthcare buildings".

Emergency Exit Signage: all escape routes will be distinctively marked by emergency exit signs following the recommendations of BS ISO 3864 Part 1: 2011 and BS 5499 Part 4: 2013. Escape route signage will include directions to the nominated assembly point outside the building.

Appropriate signage will also be provided to direct the fire service to the fire-fighting stairs at fire service access level.

Smoke Ventilation System

Fire fighting shaft: each fire-fighting stair will be provided with a 1.0m² Automatic Opening Vent (AOV) positioned at the top.

The fire-fighting lobbies will be provided with smoke ventilation

The system design will follow the accepted approach based on BRE report 79204 with specification being provided by a specialist contractor.

Intensive Care Units (ICU) HVAC Systems: The HVAC system should overpressure ICU areas and theatres relative to adjacent areas to reduce the risk of smoke spread.

Car Park: the car park will be designed as an open-sided car park and will therefore be naturally ventilated. Impulse fans will be provided to improve the performance of the ventilation system.

Escape Lifts.

Cores 01 and 02 will be provided with an evacuation lift that will be designed to comply with the guidance provided in Health Technical Memorandum 05-03: Part E – 'Escape lifts' and BS 5588-8 – 'Fire precautions in the design, construction and use of buildings: Code of practice for means of escape for disabled people' and Health Technical Memorandum 08-02 – 'Lifts'.

The lifts will be provided within the fire-fighting shafts and will therefore be enclosed with 120 minutes fire resistance and accessed through the fire-fighting lobby. The two lifts are located within separate compartments to ensure that at least one is always available in the event of a fire.

Power supply: all fire safety systems will comply with their relevant British Standard in terms of power supply.

Means of Escape

Widths of Escape routes: the width of escape routes comply with current regulations and are a minimum width of 1200mm. In the instance that more than 200 people require to use the same escape route, an additional 275mm has been added for every additional 50 persons.

Compartmentation and Sub-Compartmentation: the design of both compartments and sub compartments are compliant with the appropriate regulations

Travel Distances

The travel distances within patient accommodation all align with the recommendations provided in Table 2 below.

Area	Travel In	
	One Direction	Multiple Directions
In patient areas - two compartment exits - adjoining compartment or sub-compartment, or final exit	15m	25m 60m
Plant Rooms	12m	25m 35m in low risk areas
Other Areas	18m	45m

Final Exits: the design of the final exits recognises the often conflicting requirements of means of escape and security of hospitals. Final exit doors from public access areas will open freely by hand under any condition, including power failure; otherwise, adjacent non-automatic outward-opening doors will also be provided.

Structural Fire Resistance

Elements of structure, including, column, beam or other member forming part of a structural frame, load bearing walls and floors, will achieve a minimum of 90 minutes of fire resistance due to the building height exceeding 30m.

Patient Areas: evacuation philosophy identifies a three stage strategy of evacuation that will be implemented within patient areas.

Stage	Description
Stage 1	An evacuation signal will sound in the sub-compartment of fire origin to initiate the horizontal evacuation of the occupants to an adjoining sub-compartment or compartment. Other compartments and sub-compartment will receive an alert signal.
Stage 2	Horizontal evacuation of the entire compartment where the fire originates to an adjoining compartment. Subsequent additional horizontal evacuation to

	adjacent compartments may be undertaken prior to undertaking a vertical evacuation.
Stage 3	Vertical evacuation to outside using the lifts and stairs. This stage of evacuation will be a last resort and will only happen if a potential fire cannot be controlled, which is unlikely given that a life safety sprinkler system is installed. This stage will be highly dependent on Building Management and will need to be detailed accordingly in the Fire Safety Management Plan.

Winter Garden Fire Strategy

The winter garden will be provided with natural ventilation as part of the general ventilation strategy for the building. It is proposed to utilise this system for smoke clearance and temperature control as well. Due to the significant size of this volume and this large amount of openings provided for ventilation purpose it is proposed to consider this open space similar to an external area and not as an atrium.

External Fire Spread

Surface of External Walls: will provide a surface spread of flame classification of Class 0 (European Class: B-s3, d2). This includes external walls of ward accommodation at Level 6 – 10 within the winter garden.

Space separation

Based on information in the BRE Report 187 and following assessment, the building will align with the recommendations provided in this guidance document.

Fire-Brigade Access and Facilities

Details of the Fire Brigade and Facilities strategy have been provided. Following discussions with the relevant fire authorities, two access points to the site will be provided as per the recommendations of HTM 05-02, these include:

- London street; and

- Grove Lane.

A road designed for Fire-Brigade access and complying with HTM 05-02 will provide access around the hospital perimeter. Four fire-fighting shafts will be provided within the hospital and will serve all levels. These will be designed in accordance with the recommendations of BS 9999.

The location of the stair core and the arrangement of the floor will be designed to allow the most remote point on the floor to be within 60m of the dry riser outlet on each level. To provide sufficient hose coverage on each level, additional fire main outlets will be provided at department (fire compartment) entrances.

Acoustics

Although no statutory requirement to achieve the acoustic standards is set out in the building regulations, HTM 08-0 proposes that where achieving these acoustic criteria does not conflict with other requirements, such as infection control, operation and maintenance, flexibility and specific client requirements, the acoustic standards will be achieved.

By achieving the acoustic standards set out in HTM 08-01 it is considered that the privacy and dignity of patients would be maintained. HTM 08-01 sets out minimum sound insulation performance standards for separating walls and floors based on the relationship to adjacent spaces. The recommended levels of sound insulation performance take in to account the following factors:

- The privacy requirement for the room;
- The level of noise likely to be generated in the room during normal use; and
- The sensitivity of the adjacent room.

For any specific room types which are not covered in acoustic performance regulations, privacy and sensitivity considerations will be established and appropriate levels of sound insulation performance determined based on basic principles are to be applied.

Rain noise in accordance with HTM 08-01 recommends that noise levels during “heavy” rainfall should not exceed the internal noise level limit by more than 20 dB. Based on these recommendations, the roof over the top floor ward and podium areas will be a concrete slab

which will provide sufficient control of rain impact noise in the areas below to achieve this requirement.

Building Services Noise & Vibration: The building will be mechanically ventilated, with air handling units located remotely in the main plant areas on Level 4 and the roof. In the internal ward and clinical areas the dominant source of ambient noise under unoccupied conditions will be noise from the ventilation systems serving them.

The building services system will be designed and installed so that limits, detailed in HTM 08-01 are not exceeded in internal areas of the new hospital.

Security

Security access floor plans have been provided throughout. A summary of the overall proposed systems has been produced for the scheme proposed.

In accordance with the brief provided by the Trust, the Security Design Strategy addresses the following topics with consideration of the Secured by Design Hospitals and ACPO Safer Car Parks documents:

- Security management
- Site-wide security
- Building Envelope
- Car Parking
- Communications systems for the control room (base) to communicate patrolling officers
- Access control
- Intruder security alarms
- Panic alarms
- Electronic baby monitoring
- Closed Circuit Television (CCTV)
- Interface with Building Management Systems (BMS)

Following consideration of conflicts that often arise between designing to accommodate, security and safety, access and inclusion and clinical functionality, consultations with the Trust, the Architectural Liaison Officer, Crime Prevention Design Adviser and Counter Terrorism Security

has produced an optimum design solution regarding safety and security to be produced with particular focus on key areas including:

- Site boundary treatment, site access (vehicle and pedestrian) & signage
- Landscaping
- Vehicle parking
- Surveillance/CCTV systems
- Lighting
- Access to services
- Building envelope security
- Internal layouts – access and security systems
- Specific areas/departments of perceived risk

Site Wide Security: Secured by Design Guidance requires 2m high perimeter fencing around the site. It is proposed and agreed in consultation with the Trust, ALO & CTA representatives that the service yard and adjoining FM areas will be secured by a 2m high fence. The service yard will be kept open throughout the day to ensure free vehicle access to the service yard in turn avoiding queuing of service vehicles beyond the secure boundary. Out with working hours the service yard will be secured via 2m high security gates which will effectively 'lock down' the whole area.

The site as a whole can be accessed 24 hours a day (with exception the Service yard). Vehicle and pedestrian signage and control systems around the site will ensure that areas which are accessible by the public and those which are intended for staff/ authorised personnel are clearly identifiable and demarcated.

Access to the Emergency Department forecourt via Grove Lane will be a 'blue light' route for emergency vehicles however allowance for emergency public drop-off to Emergency Department and delivery suite will be provided. These drop-off areas will be strictly controlled and monitored.

A service road is provided around the entire site which has been designed in compliance with HTM 05-02 which will ensure Fire-Brigade 100% perimeter access around the hospital 24 hours a day.

Landscaping has been designed to act as a deterrent to unauthorised access to key areas of the site. The selection and position of trees and low level planting will be designed such that there are no “hiding places” or blind spots in the security and CCTV systems

Building Envelope

The Number of entrances points has been reduced to a minimum.

The Building envelope has been designed to avoid isolated areas, recesses and “hiding places” to promote natural surveillance and create a sense of safety for building users and visitors. Furthermore, low Lying flat roofs and scalable facades with exposed rainwater pipes have been avoided.

Access, egress and escape points around the building perimeter designed in accordance with a security standard LPS 1175 SR 2 or 3 and incorporating appropriate intruder alarm and access control systems.

All accessible external windows have been designed and certificated to BS 7950 LPS 1175 SR2 or 3.

All out of hour's access will be controlled via a control point by the Security Base adjacent to Emergency Department reception area.

Access Control Systems

An access control system, compatible with the existing Trust estate will be provided to control access throughout the facility. The need to be compatible is recognised as staff need to seamlessly transfer between sites without having to worry about carrying different access systems. The access control systems will be fully configurable; the management software will allow the system to be easily reconfigured to allow the system status to be easily changed. Access control cards, which will be provided with photo ID, logo and text as required, will be capable of being utilised for other purposes other than access control including:

- Car park access/egress
- Library book withdrawal/return

- Cashless purchase of goods from vending machines/staff restaurants/retail outlets
- Single login for IT
- Attendance (clocking on/off work)
- Guard tour management
- Lift access
- NHS Care Records Service

CCTV

CCTV coverage will be provided throughout the site for general security. Additional CCTV will be provided at the site and building entrances and within the buildings and basement as required by the Schedule 8 Part 3, namely:

- All public and staff entrances to the building with fixed cameras giving facial views on both entrance and exit
- All internal circulation routes, corridors, stairs, lift lobbies and concourse
- All public and staff entrances to all individual departments with fixed cameras giving facial views on both entrance and exit – these cameras are in addition to those covering the circulation routes barrier positions, car park levels, pay stations and both vehicular and pedestrian exit points including automatic number plate recognition (ANPR).

The final number, type and location of CCTV cameras will be determined by the Trust. The installation will include high definition fixed (HD) colour cameras, with built in vari-focal auto iris lens, indoor/outdoor type housings, flat panel LCD monitors and network video recorders (NVR). The recording of all cameras will be made on network video recorders with a 31 day recording time.

Alarms

All intrusion detection devices shall be monitored by intruder alarm panels which shall be located in each building. The intruder alarm panel will be fully monitored and controllable from the

reception desk and will communicate using an IP link over the security VLAN. All alarms will be reported to the security office at the main entrance reception on Level 0.

Door Open Alarms: all 24hour alarmed doors shall be fitted with a local door open sounder with key override.

Staff Attack/Panic Alarm: a suitable system will be provided either as part of the security systems and will be located at: main reception desk; all nurses stations and staff bases; and departmental receptions.

Emergency Break glass: emergency break glass units will be located adjacent to the secured doors and have a status output connected into the alarm system and will be connected in series with the locking system power supply to physically break power connection upon activation.

Equality

Children: the design incorporates a high degree of segregation for paediatric patients. The paediatric area of the Emergency Department, the paediatric assessment and inpatient areas are all dedicated to children as is the paediatric outpatients department. Segregated routes to theatres and diagnostic departments have been introduced where practically feasible. The design ensures that no children will share changed waits with adult patients. Play areas have been included within adult waiting areas for children accompanying adult patients, where briefed. These have been designed to provide oversight of the waiting area by reception staff or clinical staff bases. Additional child welfare amenities such as baby feed/baby change have been strategically located to support the welcoming and child-friendly environment values.

Visitors with limited mobility: it is recognised that people with limited mobility, including wheelchair users, mobility scooter users and parents with a pushchair must be able to navigate around the facility without impairment. The hospital site and building provides a step free route throughout and incorporates generously sized circulation routes, which will facilitate ease of access for wheelchair and scooter users.

The design has focussed the majority of public circulation at Level 5 where there are large circulation spaces giving access to the lift cores. Furthermore, waiting areas include at least one wheelchair space, which will accommodate most mobility scooters.

Visual Impairment: the opportunity for Braille options include hand-held maps and directions. RNIB create tactile hand-held maps, and maybe be a very useful alternative. To ensure maximum legibility signage will be:

- Located consistently
- Be of high contrast between the sign and the environment that the sign is located in
- Use a clear, easy to read typeface with high text to background contrast
- Comply with DDA best practice.

Hearing Impairment: Induction loops at all reception areas and written way finding instructions at key reception areas will be provided to aid people who have a hearing impairment.

Derogations: the Equality Act 2010 contains aspects of compliance outside of the contractors remit/influence. With regards to overall compliance with the Equality Act, the design and construction of the facility will comply with the requirements of Building Regulations Approved Document M along with other statutory guidance such as BS8300 and relevant HTMs and HBNs.

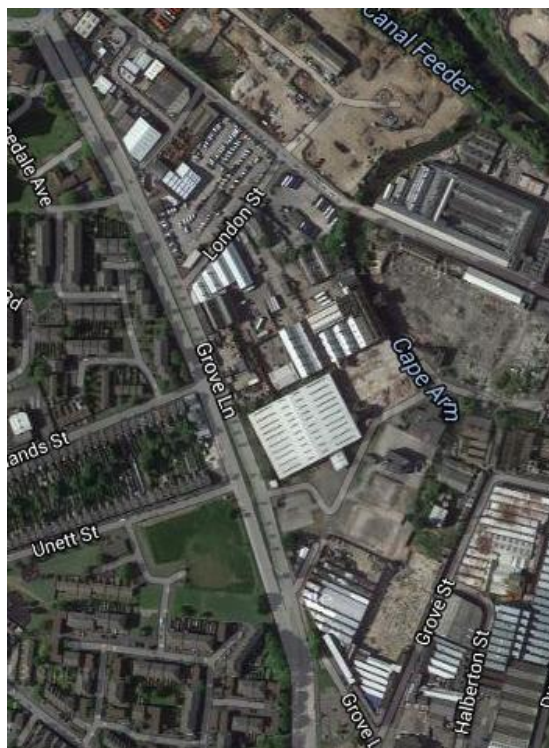
3.1.3. Civil and Structural Engineering – Project Co Proposals

The new hospital is to be constructed approximately 1.3 km east of Smethwick town centre and 2.6 km west of Birmingham City Centre. The 7.70 ha site is bounded by Grove Lane on its west, London Street to the north, Grove Street to the south and the Cape Arm Canal on its eastern side. This brownfield site has been occupied by various industrial businesses including iron works, screw and tube metal works, galvanising works and garage premises.



The site had significant industrial use. This would suggest potential issues in relation to contamination, asbestos, below ground voids or unexpected below ground structures. The available surveys indicate that there are no mine shafts anticipated and that "The site is reported as consisting of made ground (throughout the entire site) although the depth of the made ground has not been established ... The site is recorded as being clear of geological faults."

A satellite view, taken from Google Maps, is below and compared to the area shown for the site above, clearly highlights the location's significant industrial development across the site. We understand that much of the site has now been cleared by the Trust [up-date with final suite of surveys etc]



The ITPD states that the “Trust will demolish all above ground structures to slab level and currently intends to complete remediation of the site during the procurement period. This would mean that the Trust will hand over a fully remediated site which is under the full control of the successful Bidder to enable construction process to start immediately after Financial Close.”

The Trust Construction Requirements state that “Project Co shall undertake their own, independent review of any existing information or data made available or obtained by them to confirm its adequacy or otherwise. It is Project Co’s responsibility to obtain relevant, suitable and adequate ground investigation data necessary for them to discharge their duties under the Project Agreement, including conducting their own ground investigation surveys”

Discussions with the Bidder indicates that they are satisfied in relation that sufficient information is available to finalise foundation design and associated risks at this time.[Whilst further surveys are still to be provided, the intention is that the Trust will remediate what is identified and Carillion will come in to approve those works. This should have the effect of mitigating the risk of unanticipated remediation work being required during the construction phase.]

History

In the late 1800s (1888 through to 1890), the southern area of the site was occupied by individual metal processing works, with a number of smaller (potentially residential properties) located to Grove Lane and Grove Street. The central areas of site were occupied by two large metal processing works units. A number of smaller properties (likely to have been residential and small industrial premises) were located within the north western and northern areas of the site. At this time a backfilled wharf was located in the northern corner of the site.

During the early 1900s (1902 through to 1904), some of the industrial properties to the southern area of the site had been cleared. One of the large metal processing works units had been extended whilst the other had been cleared.

Between 1918 to 1921, some further site clearance activities had been undertaken to the southern areas of the site. A large structural development had been erected in the northern area of the site.

By 1938, an extension had been added to existing industrial premises and a new "Scrap Metal Works" had been constructed at the junction of Grove Street and Abberley Street. A new footbridge had been developed across the Cape Arm Canal linking the St Georges Works (Screw) to Patent Screw Works (a new development). The disused wharf had been infilled whilst some clearance works had been undertaken to the northern area of the site.

In 1955, the Atlas Aluminium Works (formerly Patent Screw Works) had been extended and a new warehouse constructed adjacent to the works. Another extension had been constructed to the St Georges Works (Screw).

By 1972, the Cape Arm Canal had been reduced, with some extension to premises at the junction of Grove Lane and London Street. A new car park was located within the northern area of the site.

There was then little significant change until 2002, where there was large scale clearance of the site.

Site Access

Access to the site has been carefully considered by the Bidder and they state that they are satisfied in relation to access for cranes and deliveries along good A roads around the site, delivering into the Southern corner, and that with the currently intended 6 crane solution they will be able to store, move and install major components and materials across the site as required.

The Proposed Building

The proposed building is up to eight storeys high, approximately rectangular in plan with a sloping transparent façade almost full height of the south elevation behind which is a large atrium space.

The main building occupies an area approximately 260 metres x 130 metres with access around west, north and east sides and a larger landscaped area to the south.

The site falls some 7 metres from north to south meaning there will be retaining walls on three sides of the site.

There will be two levels of car parking starting at lower ground level with double height service areas to the north.

The foundations will be piled down to underlying bedrock and the upper floors will generally be from post tensioned concrete flat slab construction.

The surface water drainage will flow through attenuation tanks and a storage pond to control the run-off into a culverted brook to the south of the site.

Foul water drainage will connect to existing public sewers around the perimeter of the site.

In considering the civil & structural elements of the project at this stage, we have referred to the following documents:

- Phase 1 Geo-environmental Assessment report by Sandwell MBC Streetscene Urban Design (Geotechnics) dated May 2014;
- Preliminary Ground Investigation Report by Ground Investigation and Piling Ltd dated November 2014;
- Standpipe Gas & Groundwater Monitoring Results from Ground Investigation and Piling Ltd up to January 2015;
- Midlands Metropolitan Hospital Remediation Strategy by Capita dated February 2015
- ITPD Volumes 1 to 4;
- Schedule 8 Part 3 – TCRs; and
- Civil and structural engineering scheme drawings to date from Carillion / Curtins Consulting / TPS Consult.

Ground conditions

A Phase 1 Geo-Environmental Assessment was carried out from October 2013 by Sandwell MBC Streetscene Urban Design (Geotechnics) and their report was published in May 2014.

Ground investigation work has been carried out which included 3 rotary boreholes, 27 cable percussive boreholes, 27 window sampling boreholes and 38 machine dug trial pits. These were sampled for laboratory testing and ground gas and ground water monitoring was carried out. Capita produced a report in February 2015 which summarises the findings and makes recommendations for remediation of the ground.

The strata encountered can be summarised as follows:

- Made ground with existing slabs, foundations etc remaining from previous site usage.
- Drift deposits comprising sandy gravelly clay, silt, gravelly sand and gravel.
- Underlying sandstone bedrock with mudstone occasionally on top of the sandstone.

This broadly matches the geological survey information for the area which gives glacial till or boulder clay over Wildmoor Sandstone.

The site is not in a zone of coal or limestone mining according to the Coal Authority and British Geological Survey information.

Asbestos was located in a number of samples. It is proposed that capping the site before any landscaping is carried out will be sufficient to reduce any risk from this to acceptable levels.

Some ground gases were identified and appropriate gas protection measures have been recommended for protecting the new development from these.

Tests on groundwater have detected the presence of Hydrocarbons and Metals (copper, nickel, lead, zinc, chromium) as well as Sulphates, Nitrates and VOCs. These are above the threshold values and there is a requirement for groundwater clean-up/remediation. Further monitoring is ongoing and definitive proposals for remediation are awaited.

Archaeological Interest

The site lies within potential archaeological interest Zone L. However, following the construction of the cellar system, it was considered there will be no items of archaeological interest.

Flood Risk Assessment

The site itself is not within a flood risk area, as the ground investigation desk study confirms. There is a requirement to attenuate surface water run-off from the site and the natural fall from north to south across the site will dictate where this storage can be provided.

Substructure

The preferred foundation solution put forward is to install piles down to the sandstone bedrock. Either rotary bored or continuous flight augered piles may be appropriate. Pile loads, diameters and pile caps sizes have been provided and all appear to be much as we would expect.

Cantilever piled retaining walls have been indicated around three sides of the site (west, north and east). Contiguous or sheet piling are both referred to and with a maximum height of 8 metres. Either of these solutions are possible subject to detailed design. A piled retaining wall is indicated between the car parking and the canal.

[The ground floor slab is not defined on any of the information currently available. If the made ground is removed and a suitable sub-base provided it should be possible to have a ground bearing slab (or road / car park construction). This detail can be provided at the next stage]. A suspended ground floor slab would also be technically possible if suitable ground bearing cannot be achieved.

[Damp proofing of lower ground floor. No specification or details have been provided at this stage. The detailing of the membrane over pile tops and around pipes or other penetrations is critical. This detail can be provided at the next stage.] Any movement joints in the ground floor slab will need to be taken into account. While the majority of the ground floor will be service yard or car parking there are offices for facilities management and these areas will need damp proofing to habitable standards.

Superstructure

The upper floors are to be of post-tensioned reinforced concrete flat slab construction of varying thicknesses as defined by usage of areas. The structural grid at 7.8m x 7.8m is suitable for this

form of construction. The flat slab construction is very suitable for this type of building with total flexibility for routing services beneath the slab and good fire protection between floors. Locations for penetrations through the slabs have been considered with the provision of zones where holes may be core drilled. Major services will be routed through risers to keep slab penetrations to a minimum.

Reinforced concrete columns may be either insitu or precast. The overall structural concept does not appear to rely on the columns for lateral stability thus giving the opportunity to use precast concrete to speed up construction.

Movement joints are indicated for a maximum continuous slab size of approximately 47m x 86m. Dowel bars would transfer shear across joints. For this post-tensioned form of construction these parameters are acceptable.

Stability frames are located throughout the building and comprise concrete cores, shear walls and 'architectural' cross bracing. The latter cross bracing using Macalloy bars will obviously require careful detailing both to achieve the desired visual effect but also to ensure that connections to the main structure transfer the loads correctly.

Disproportionate collapse does not appear to have been specifically addressed at this stage. The post-tensioned slabs are very amenable in this respect and columns may or may not need to be considered as 'key elements'.

[The link bridge structures proposed between the ends of the ward blocks will need particular consideration with respect to disproportionate collapse. Since these are suspended from above, protection of key elements or in-built redundancy will need to be included as part of these structures and can be further considered at later stage.]

The atrium roof structure proposed uses a mixture of steel and flitched glulam beams to support a sloping transparent wall of ETFE cushions. The structure is well braced and provided the specialist detailing and installation is well executed this should produce a very distinctive and eye catching elevation to the building.

[There are steel core structures within the atrium which will house stairs and lifts serving the ward 'wings'. Preliminary alternative structural schemes have been produced and it remains for the design of these to be developed and can be considered at a later stage.]

Drainage

The overall scheme for surface water drainage from the buildings and surrounding external paved areas appears to have been designed to be SUDS compliant (Sustainable Urban Drainage Systems).

Volumes of attenuation, including below ground storage and pond(s) are to be provided. The underlying ground water level is either within the sandstone which is classified as an aquifer, or in the sandy gravelly clay which would be perched at a higher level. Given the nature of the ground it is not likely that there will be much percolation of surface water into the ground via ponds, reed beds or swales. It is therefore assumed that the run-off calculations will not need to take this into account.

The surface water scheme is very much dependent upon consent being obtained to discharge to the culverted course of Boundary Brook which runs along Grove Street.

The foul drainage can apparently be discharge to the public sewers in London Street, Grove Lane and Grove Street. This all looks feasible and subject to consent being granted should not be a problem.

External works and car parking

Car parking will be provided on two levels from ground floor level underneath the majority of the main building. Service vehicles will use a double height service area at the north end of building. Access for buses will be to the front of the building.

3.1.4. Mechanical and Electrical Engineering – Project Co Proposals

Plant Room & Riser Strategy

The plant room and riser strategy as proposed by the contractor is very clear and well-coordinated with the architectural scheme. GA 1:200 plant layout drawings have been provided for the ground floor and energy centre, level 01 AHU plant room layout, level 04 plant arrangements, and level 10 plant arrangements. [Our review identified a number of points in

this report where further clarification would be helpful and have been raised with Carillion and can be ratified at the next stage:

- Typical manufacture selection for the AHU plant items to verify the sizes used for spatial planning.
- Typical manufacture selection for the main plant items to verify the sizes used for spatial planning.
- Ventilation schematics for upper level of the buildings suggest that the space allowance should be made for 15No of AHU's including 3 for future expansion. [Allowance has been made within level 10 plant room.]
- We have suggested that all ductwork routes for ventilation plant rooms are shown to indicate the connections to the risers and sufficiently distanced intake and exhaust louvers.
- Provide schematic drawings for the systems allowing space allowance check within the risers, plant rooms and main distribution routes.]

[Clarification has been requested in relation to a range of matters, including those listed below, however we are satisfied that these are all matters that should be capable of being appropriately addressed:

- our comments on concept schematics and update if necessary;
- our comments on concept schematics and update if necessary;
- concept schematics for all the systems designed by MEP engineers;
- the HV electrical supplies are derived from a common primary sub-station (rather than separate ones as per HTM 06-01);
- the proposed electrical load of 5.1MVA appears to be based on a 49W/m² value (which differs from and is less than that recommended by BSRIA of 65W/m²);
- the standby generators and fuel tanks are located together;
- the lighting design has not been developed in detail with only indicative information at this stage; and
- more detail required in relation to the IM&T systems, including all Trust and Contractor requirements.]

Design Development

In relation to Mechanical, Public Health Services and Medical Gas services based on the submitted documents, discussion with the contractor and received comments we would confirm

that the proposed design solution in principal conforms to the HTM standards and is agreement with the general design principles as defined in the client's brief. In some instances the level of detail submitted has not clearly identified the design intent however it has been clarified via technical questions that the contractor intention is to comply with the client's brief.

The energy proposal for the building has been provided in various submittals and summarised in section ET4.5.14. From the submitted documents we understand that Part L C02 emissions and BREEAM ENE01 calculations have not been produced for the proposed scheme. Although the design approach to energy consumption is correct and the contractor exudes high level of confidence based on the previous experience it is not possible for us to verify that the proposed scheme satisfies Part L and BREEAM ENE01. We would recommend that the building model is developed for the proposed building and calculation verified by the use of approved software package.

In addition to Part L and BREEAM calculations the client's brief imposes maximum building energy target of 42GJ/ 100m³ / annum not to be exceeded. It is understood from the submitted documents and Carillion's comments that the calculation does not follow CIBSE Guide F and TM54 strategy. Certain assumptions critical for the calculations output are not clear, e.g. 30% diversity factor on building cooling load, 70% efficiency on AHU heat exchangers. On this basis we could not confirm that sufficient evidence have been provided proving that the maximum energy target has been met.

In relation to Electrical Services, based on the submittal documents reviewed discussion with the contractor and received comments we would confirm that the design solution in principal either conforms to the HTM standards and is agreement with the general design principles as defined in the client's brief.

We would suggest that the contractors design is at RIBA Stage 3A however we would recommend further analysis of the building energy strategy. Also we would recommend more clarity on the incoming power supplies, electrical resilience and lighting design (including the basis of which standards are being used).

Overview of the Mechanical & Electrical Design

The project involves a design of a new acute hospital in Birmingham. The building is a fully mechanically ventilated and cooled building which is set to meet very high BREEAM target and

energy consumption targets. The building will incorporate a raft of sustainable technologies including Ground Source Heat Pump and Combined Heat and Power.

The building services include following mechanical, electrical and public health services:

- Mechanical & PH engineering services
- Low Temperature Hot Water Heating
- Chilled water systems
- Domestic hot and cold water services
- Ventilation supply and extract systems
- Special extract systems
- Building Management Systems
- Medical gases
- Natural Gas
- Piped fuel oil
- Pneumatic air tube transfer system
- Gaseous fire suppression system
- Dry riser & charged dry riser Installation
- Sprinkler system
- External fire hydrant system
- Foul water drainage above ground
- High Voltage distribution
- High Voltage Switchgear
- LV Standby Generator Installation
- Low Voltage Distribution
- UPS/IPS
- Small Power Installation
- Lighting
- Emergency Lighting / De-centralised battery and self-testing equipment
- External and Car Park Lighting
- Fire detection and Alarm System
- Induction Loop System
- Security System (CCTV, Access Control, Intruder Alarm, Staff Attack)
- Nurse Call System
- Lightning Protection System

- Earthing
- Data and Communications structured wiring.

Our comments on the mechanical and electrical engineering design has been based on the following information:

- The consortiums ITPD draft final bid;
- The ITPD and the associate TCRs; and
- Supplementary information provided directly by Carillion during our review which included drawings referred to but not included or apparent with the original ITPD response together with the Fire Strategy Report, Threat and Risk Assessment (TARA) and Derogations Schedule.

[We held a review meeting with Carillion and have requested additional information as below, which is still to be provided and will allow a better understanding of the design and further review checks. The following has been provided:

- Drawing Register;
- Fire Strategy;
- Schedule of Derogations;
- Concept Schematics for Ventilation Systems;
- Environmental Treatment Strategy Drawings; and
- Responses to mechanical and electrical review questions.

The following information has been requested however still awaited, however we are satisfied that this should not prevent progress to the next stage of the project.

- Typical Air Handling Unit Selection with information on physical sizes and plate heat exchanger efficiencies;
- Pneumatic Tube Concept Schematics;
- Above Ground Drainage Design Schematics;
- DX Cooling System Schematics; and
- Natural Gas and Oil System Schematics.]

Our review focused on the following areas:

- General review of the current level of design;
- Energy Proposals;
- Review of the building internal layouts with the main focus on plant rooms, risers and distribution routes; and
- Assessment of mechanical and electrical systems (compliance review with client's brief and statutory requirements).

Design Development

For the purposes of assessing development of design, we used the RIBA Plan of Work as a guidance published in May 2013 and followed industry standards as described within BSRIA Guide BG 6/ 2014 (6ths Edition). BSRIA Guide BG 6/ 2014 provides detailed description of the building services deliverables and activities for a building services designer at appropriate levels. Please refer to Appendix E RIBA Stage Deliverables for more information.

The services included within the Building Services scope are assumed to align with Contractor's Proposal as per ET 4.5.1 and includes both Mechanical and Electrical Services.

The level of deliverables reviewed varies across the disciplines; however we would suggest that in principle the contractor submittal is aimed to satisfy deliverables in line with RIBA Stage 2 and provides additional information adequate to RIBA Stage 3A. [Subject to MEP clarification and question which we have issued to the contractor to allow better understand].

The following key areas addressed by the Project Co proposals are:

- Outline Proposal and Specification
- Analysis of Broad Environmental Impact;
- Information on Negotiation of Incoming Services;
- Concept Sketch Drawings;
- Concept Schematics;
- Main plant room sizes on drawings (as RIBA Stage 3A deliverables);
- Main riser sized and location fixed (as RIBA Stage 3A deliverables);
- Main distribution routes identified (as RIBA Stage 3A deliverables); and
- Treatment Zones Strategy Agreed (as RIBA Stage 3A deliverables).

[We identified certain areas of the design which were less developed or unclear. We would suggest that the contractor will focus on these aspects of the design:

AREA OF DESIGN	SUGGESTED ACTION
Ventilation schematics	Please review design comments and address where necessary
Car park ventilation	Strategy need clarification and perhaps further analysis
LTHW schematics	Please review design comments and address where necessary
Chilled water schematics	Please review design comments and address where necessary
Water Services	Please review design comments and address where necessary
Pneumatic tube system	Please provide concept schematics for the system
Natural gas system	Please provide concept schematics for the system
Piped fuel oil schematics	Please provide concept schematics for the system
Dry risers schematics	Please provide concept schematics for the system
DX system	Please provide concept schematics for the system
External fire hydrants	Please review design comments and address where necessary
External services	Please review design comments and address where necessary
Foul water and drainage	Strategy for above ground car park drainage not clear. Areas served by specialist drainage systems shall be identified (i.e. do you provide specialist lab drainage or car park drainage with petrol interceptors).
ENERGY Calculations	Please provide BREEAM ENE01 Calculations
ENERGY Calculations	Please provide Part L Analysis
Maximum Building Energy Consumption Calculations	Please review design comments and address where necessary

Energy Proposal

We reviewed the Contractor's proposals in relation to the energy requirements. The conceptual approach to the energy strategy is sensible and reflects good practice approach. The contractor suggests reducing the energy demand first followed by the use of energy efficient systems in the building and adding the Renewable and Low Carbon Technology as the final principle. To

minimise the energy demand the contractor has proposed fabric improvements: these were enhanced thermal properties of the external envelope and low infiltration rates.

The proposal of energy efficient building systems is less descriptive and suggests that variable speed drives on pumps and fans would be used, along with LED lighting, lighting control, ventilation heat recovery and local controls. As these elements are in control of Building Services Engineer [we believe that the proposed section could provide more details and we have raised queries]:

Variable Speed Pumps	It is not clear how the energy savings from variable speed pumps would be achieved in the instances where 3-port valves are proposed. Pumping strategy requires further clarification, as listed in Appendix C.
Variable Speed Fans	Presumably this element provides initial energy savings during the commissioning stage however the fans operate as 'Constant Volume' therefore operational energy savings are minimal?
LED Lighting and Controls	We would agree with this proposal and WSP/PB will review in more detail when design information and selection is available
Heat Recovery	The contractor suggests that the average annual heat recovery achieved will be circa 70% on majority of the ventilation systems. This proposal is very good however we would like to see some technical details to understand how it is achieved
Chillers	Perhaps efficiency improvements can be achieved by using chillers with 'free cycle' serving higher temperature circuits.

The last element of efficiency and carbon savings of the contractor's proposal is based on renewable technologies, proposing 800kW Combined Heat and Power (CHP) unit and 250kW Ground Source Heat Pump (GSHP). We believe that these technologies can work well within the proposed building, providing the units size, controls and installation. [Main areas requiring clarification in respect to these technologies are and have been raised with Carillion as below including a range of queries. We have no concerns in relation to the project proceeding at this stage]

CHP	Size and control of the flow through the proposed buffer vessels. How the maximum return temperature is always achieved allowing the CHP to operate efficiently.
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	The size of the CHP unit size should be reviewed at the next stage when detailed thermal process is available and verified in line with Part L and BREEAM ENE01
GSHP	Further clarification is required as detailed in Appendix C – Mechanical Review. Both cooling and heating schematics are not showing the main installation details The size of the GSHP unit size should be reviewed at the next stage when detailed thermal process is available and verified in line with Part L and BREEAM ENE01

It is the client's requirement that the building would meet the energy target of 42 GJ/ 100m³ pa. The target would appear to be achievable. Initial discussions with the Bidder indicates that they are designing within this target.

Carillion addressed the client's requirements via preliminary calculations files 'Appendix ET4.5.14 Energy Model'. The calculations suggest that the energy model meets client's energy requirement. [A number of calculation specific comments have been made, some of the main points repeated here:

- We would suggest dynamic simulation for cooling and heating, however degree day calculations can be accepted at this stage.
- Degree day calculation method should be used for cooling and de-humidification at this stage.
- It is not clear whether all energy used in the building has been included in the assessment, some of the examples being: lift energy, kitchen cold stores, car park lighting, car park mechanical ventilation, drainage sump pumps.]

Comments on Building Layouts

The plant room and riser strategy as proposed by the contractor is very clear and well-coordinated within the architectural scheme. GA 1:200 plant layout drawings have been provided for the ground floor and energy centre, level 01 AHU plant room layout, level 04 plant

arrangements, and level 10 plant arrangements. [We have some outstanding queries, which may be addressed as the design develops and should not prevent progress at this stage:

- We have requested AHU selection for main typical sizes to verify the size used and maintenance space required (not received 03/06/15)
- We have requested physical dimensions for the main plant items to verify the sizes used (not received 03/06/15)
- We have suggested that all ductwork routes for ventilation plant rooms are shown to indicate the connections to the risers and that sufficient distances between intake and exhaust louvers are achieved.
- Main trunking and pipework routes should be shown to allow full understanding of coordinating, especially at level 04 plant room.
- Ventilation schematics for upper level of the buildings suggest that the space allowance should be made for 15No of AHU's including 3 for future expansion. We have asked for confirmation of this allowance has been made within level 10 plant room.
- Provide cross reference for detailed risers with the layouts and schematics to allow further check
- Please indicate how riser ventilation ductwork connects with the main runs including location and size of Fire Smoke Dampers and actuators.
- Clarify indicative height of the boilers / CHP unit flue.
- Clarify location and height of the generators flues.
- Provide schematic drawings for all the systems allowing a space allowance check within the risers, plant rooms and main distribution routes.]

Mechanical Systems

[We have reviewed the mechanical systems in detail based on the information received. We have raised a wide range of queries to permit a more detailed understanding and these have been submitted to Carillion. The more significant issues include the following:

- A range of comments on concept schematics;
- Provide concept schematics for all the systems designed by MEP engineers; and
- Agree with the client diversity factors used for sizing the main equipment.]

Electrical Systems

In general, the electrical services design as currently presented appears in keeping with the Trusts ITPD document. [There are however a number of significant issues which do not appear to be addressed and which would have or could have an impact on delivering the project, though at this stage we are satisfied that the project can still progress and can be addressed as the design develops.]

[There are also a number of generally minor points which require clarification or further detail. These have been discussed with the bidder, Carillion and their Design Team, and their response is awaited.]

[The more significant issues have been covered in our comments above]

3.2. Demolition Methodology

Not applicable. Note above in relation to the Trust clearing the site.

3.3. Planning Requirements

Outline Planning

The Trust's initial Outline Planning Application (DC/08/49418) for the Midland Metropolitan Hospital at Grove Lane was submitted on 4th April 2008. This application included the reserved matter of access and was accompanied by an Environmental Statement and a number of other supporting documents. The application included the redevelopment of the Grove Lane site to provide a new acute hospital (Use Class C2) and supporting education, research and administration centre (Use Class B1 (a) and (b), together with a gym (D2), crèche (D1) and car parking.

Due to project delays it was not possible for a detailed reserved matters planning application to be submitted. In order to mitigate the risks under the Extension of Time Limits legislation seeking to extend their current planning permission for a further six years. This application (DC/13/55826) was validated on 24th April 2013 and was approved at the Council Planning Committee on 19th June 2013. The Decision Notice confirmed that this consent will be for a further 6 years, up until 19th June 2019.

Bidder Planning Programme

The Bidder has outlined in their Draft Final Bid their pre-application engagement programme with the Local Authority; ensuring that the proposed development has been carefully explained, discussed and that feedback has been used to develop the proposals, with the aim of building support from the Local Planning Authority and other related key stakeholders prior to the submission of the planning application in June 2015

The Bidder has outlined the following 2015 key dates for delivering the detailed planning

- 25 March Submission of EIA Scoping Report to LPA
- 29 April EIA Scoping Opinion received from LPA
- 4 May Environmental Statement & planning application - first draft review
- 11 May – 4 June Final project plans closed out
- 4 June Environmental Statement & planning application - final review
- 8 June – 11 June Environmental Statement & planning application - legal review
- 12 – 17 June Environmental Statement and planning application – final amendments
- 18 – 24 June Environmental Statement and planning application – printing and production
- 26 June Submission of planning application
- w/c 21 September Approximate target accelerated committee date
- 16 October End of statutory 16 week determination period
- 6 November Approximate end of Judicial Review period (accelerated determination option)
- 27 November Approximate end of Judicial Review period (16 week determination option)

The Bidder notes that the Local Planning Authority, with a 16 week period to determine the planning application (in accordance with the statutory time period for an EIA application), takes up to the 26 October, however due to the extensive pre-application engagement carried out, the Bidder intends to work with the Local Planning Authority to seek an accelerated determination of the application, with a target planning committee date expected for mid to late September 2015 (committee dates for the post election period in 2015 have yet to be set).

The Bidder has outlined that allowing for a six week Judicial Review period and using these two determination scenarios, the following provides possible options for when the legal review period is expected to have expired:

- 6 November 2015 : Accelerated determination timeframe
- 27 November 2015: Statutory 16 week determination period

The Planning Programme demonstrates that full planning approval can be achieved and the Judicial Review Period can elapse, prior to the project's proposed Financial Close.

Trust Responsibility

The following table of conditions define the Trust's responsibility in respect of the current conditions attached to the 2013 outline Planning Permission for the Hospital.

Condition No	Condition	Condition Requirement
4 – Compliance with approved plans	The implemented development must conform with the terms of and the plans accompanying the application for permission and must remain in conformity with such terms and plans, save as may be otherwise required by (any of) the following condition(s), or approved amendments(s).	Trust responsible that the implemented development complies with the approved plans and particulars for the lifetime of the development in terms of future adaption or development of the site
17 – Public Art	The approved scheme for public art shall be implemented prior to the opening of the hospital and retained as such.	Trust responsible for the procurement, commissioning and retention of public art.
55 – Refuse Storage	Before the development is commenced details of refuse storage within the development shall be submitted to and approved by the Local Planning Authority. The approved refuse storage shall be implemented before the development is brought into use and thereafter retained as such.	Trust responsible for providing details of waste management and retaining refuse storage facilities in accordance with the approved strategy.
56 – Car parking management plan	Before the development is commenced a car park management plan shall be submitted to and approved by the Local Planning Authority. When agreed the car parking shall be managed in accordance with this plan unless otherwise agreed in writing by the Local Planning Authority.	Trust to provide a car parking management strategy as operator of the car park and is responsible for the implementation of it.
57 – Signage at the existing estate	Before the development is commenced a scheme shall be submitted to and approved by the Local Planning Authority for modifications to the existing signage for both Dudley Road Hospital and Sandwell General Hospital and community hospitals together with new signage for the Acute Hospital.	Trust responsible for modifying signage at the existing estate and external to the site Please note that this is an unlawful condition and should either be removed or set as an informative note only.

Condition No	Condition	Condition Requirement
58 – Implementation of the signage	The approved signage schemes shall be implemented within 3 months of completion of the Acute Hospital unless agreed otherwise in writing by the Local Planning Authority.	Trust responsible for implementing the signage schemes at the existing state within 3 months of completion of the hospital. Please note that this is an unlawful condition and should either be removed or set as informative note only.

Section 106 Planning Obligation

The Section 106 Planning Obligation for the 2013 outline permission requires contributions towards the following heads of terms:

- Highway works contribution totalling £200,000 covering two local upgrade schemes
- Travel Plan
- Controlled Parking zone requiring a contribution of £2,500 (index link is capped at £20,000)
- Canal Enhancement Contribution of £100,000 (agreed at a meeting with the Canal and River Trust as being applied to towpath access improvements at the Winson Green access.

The Bidder has stated that on the basis that there is no requirement on the developer in delivering any of the Heads of Terms stated and with the clear responsibility upon the Trust (2.8.5 of the ITPD) to provide the various contributions, the Bidder should be specifically stated as being excluded within the new S106 Planning Obligation as having no responsibility for payment.

Section 278 Works

The Section 278 Works as required in the outline planning are summarised below identifying the Project Co requirements and the Trust responsibility. This would appear to be suitably considered.

Element of Work	Phase of Work	Project Co Responsibility	Trust Responsibility
A) London Street The design and implementation of traffic signals on Cranford Street, raised junction entry treatment, raised area between service yard access and staff car park access.	PFI	Scheme design to determine outline scope of works liaising with Highways. No Works	Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works
B) Grove Lane/London Street junction The design and implementation of raising the Grove Lane carriageway to suit adjacent access, retention of raised works from commercial premises, protection / access to electrical sub-station on London Street	PFI	Scheme design to determine outline scope of works liaising with Highways. No Works	Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works
C) Emergency Department access on Grove Lane The design and implementation of forming an access into ED, share of raising Grove Lane carriageway, formation of access through central reserve	PFI	Scheme design to determine outline scope of works liaising with Highways. Works up to bellmouth formed part of 278	Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works
D) Public Emergency Department / Maternity accesses off/on Grove Lane. The design and implementation of forming an access into public ED / Maternity, formation of egress from public ED / Maternity, closing existing central reserve gap.	PFI	Scheme design to determine outline scope of works liaising with Highways. Works up to bellmouth formed part of 278	Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works

Element of Work	Phase of Work	Project Co Responsibility	Trust Responsibility
<p>E) Main entry junction</p> <p>The design and implementation of modifying existing kerblines to accommodate junction, formation of access into hospital, provision of traffic signalised junction including pedestrian facilities</p>	PFI	<p>Scheme design to determine outline scope of works liaising with Highways. Works up to bellmouth formed part of 278</p>	<p>Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works</p>
<p>F) Bus Hub on old Grove Lane</p> <p>The design and implementation of forming three saw-tooth bus hub, provision /installation of three bus shelters, widening of old Grove Lane, promotion of northbound one-way order on old Grove Lane between Dudley Road and Grove Street</p>	PFI	<p>Scheme design to determine outline scope of works liaising with Highways. No Works</p>	<p>Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works</p>
<p>G) Old Grove Lane / Dudley Road junction</p> <p>The design and implementation of providing a ghost island junction for right turning traffic off Dudley Road into old Grove Lane, provision of Puffin pedestrian crossing and associated ancillary equipment such as detection</p>	PFI	<p>Scheme design to determine outline scope of works liaising with Highways. No Works</p>	<p>Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works</p>
<p>H) Education / Research / Admin access on Grove Street</p> <p>The design and implementation of a new access into/out of the development zone for the new Education, Research and Administration building</p>	Future	<p>Scheme design to determine outline scope of works liaising with Highways. No Works</p>	<p>Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works</p>

Element of Work	Phase of Work	Project Co Responsibility	Trust Responsibility
I) Crèche access on Grove Street The design and implementation of a new access into/out of the development zone for the new Education, Research and Administration building	Future	Scheme design to determine outline scope of works liaising with Highways. No Works	Legal agreement between Trust and Highways. Costs associated with detail design, procurement and implementation of the works

3.4. Health and Safety

3.4.1. CDM Co-ordinator

TPS Schal has been appointed as the CDM Co-ordinator and appear to have been appropriately engaged for this stage of the project. They are to provide guidance to ensure that all parties fulfil their obligations under the CDM Regulations. Carillion have confirmed that TPS are fully aware of their designing for safety process and “are taking a proactive role in establishing the best options for health and safety within the constraints of the project.” We understand that TPS Schal be retained to support the project in accordance with the new CDM regulations and the associated Principal Designer and Principal Contractor requirements.

TPS are to undertake the following:

- Assemble the pre-construction Health & Safety Information pack.
- Liaise with the Trust’s Planning Supervisor to ensure the level of information being transferred within the pre-construction Health & Safety File is appropriate.
- This will be prepared from the available site information and will assess and highlight where and when the principal risks are likely to occur.
- Provide a revised notification of the project to the HSE when required.
- Following receipt of the Principal Contractor’s Construction Health & Safety Plan, review the document and advise the Client on its suitability for construction work to commence.
- Throughout the project co-ordinate the development of the Health and Safety File.

3.4.2. Construction Phase Health, Safety and Environmental Plan

An Exemplar Construction Management Plan (CMP) for the construction period has been included in Carillion's draft final bid. A Fully detailed CMP will be developed and issued during the next stage. This will be developed in more detail at the next stage and we are satisfied that this is being suitably considered for this stage of the project.

3.4.3. On-Site Construction Works Health & Safety

Carillion have noted that "the early stages of design development have the greatest influence on the inherent safety of the final design. Our proposals will identify that there is a safe method of constructing and operating the building. Our strategy at this stage is to ensure where possible that there is more than one method to allow flexibility in detailed design. Design is an iterative process and as such our design will be repeatedly tested. We believe this to be essential in respect of Health and Safety. As a design develops, changes can unwittingly introduce hazards if unchecked."

This will be developed in more detail at the next stage and we are satisfied that this is being suitably considered for this stage of the project.

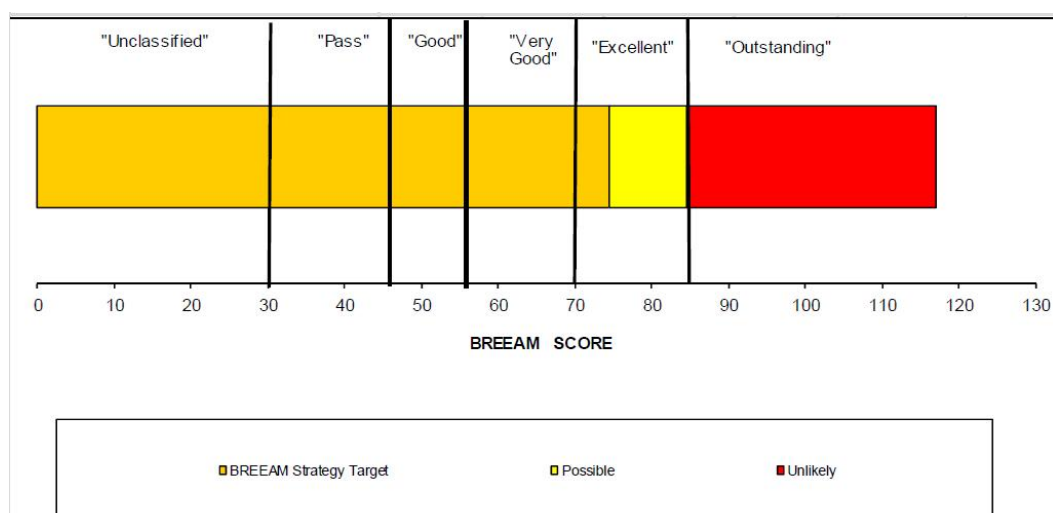
3.5. BREEAM

We note that BREEAM Healthcare Excellent is required and initial discussions with the Bidder indicates that this will be achieved. The Bidder's Draft Final Bid notes that they have been able to apply their recent experience on a number of BREEAM 2011 excellent large acute hospitals, including Royal Liverpool Hospital. Section TE4.5.13 of the Bidder's Draft Final Bid outlines their approach to the achievement of a BREEAM Healthcare Excellent Score. They summarise their analysis in the following table. They appear to have appropriately addressed the BREEAM requirements in so far as is possible at this time, supported by a detailed assessment criteria and credit status report.

Table 1 BREEAM UK 2011 New Construction: Healthcare – MMH BREEAM Strategy summary

Issue Category	Score available (including Exemplary Level Credits)	BREEAM Strategy Target	Possible	Unlikely
Management	14%	12.91	1.09	0.00
Health & Wellbeing	16%	11.47	0.00	4.53
Energy	26%	11.40	3.17	11.43
Transport	8%	4.00	1.60	2.40
Water	7%	4.00	0.00	3.00
Materials	16.50%	11.62	0.96	3.92
Waste	9.5%	5.00	0.00	4.50
Land use & Ecology	10%	8.00	1.00	1.00
Pollution	10%	6.15	2.31	1.54
TOTALS		74.55	10.13	32.32

The Bidder also provided a helpful summary of how these scores map against the required scores for different grades of BREEAM as below.



4. CONSTRUCTION

4.1. Programming and Phasing

4.1.1. Construction Programme

This comment is based on the Construction Programme, provided in section ET4.8.2 of the draft final bid. A fully detailed Construction Management Plan is to be developed and issued during the next stage of the bid.

Prior to Carillion receiving the site to commence 'Early Works' the Trust are due to complete remediation works to the site which are planned to be completed by July 2015.

The Construction Contractor is aiming for a start on site date of 2nd November 2015. This will involve early work, prior to the main building construction, securing site boundary with hoarding system, the initial site preparation of infrastructure, utilities and site establishment with site excavations also starting.

Ground engineering and stabilisation works will progress from 30th November 2015, and will include stripping of top soil, lime stabilisation works, retaining walls and piling activities.

A contiguous piled wall along the Grove Lane boundary will act as a retained structure to enable the completion of the cut and fill excavation works to create level surface for completion of piling works at Ground Level. On the Completion of sufficient pile caps the will release the start of the construction to the superstructure works.

Construction of the superstructure is due to commence on February 2016, and ready for first phase of fit-out by late August 2016. These will be constructed using traditional construction methodologies.

Construction of the superstructure works will commence early on 15th February 2016, with the frame due to be complete by February 2017 and weather tight envelope thereafter fully complete by May 2017.

The proposed superstructure build system which will form the basis of the Hospital will be an in-situ post tensioned concrete structure. The Construction of the superstructure will progress from South-East to North-West through the building with all stair and lift cores being either jump form or slip form construction. Main core and shear wall construction will progress in line with the progress of the building frame.

The building envelope will comprise of a structural framed system, the advanced installation of this system will provide a weather tight condition leading to the commencement of fit-out works. This system will be applied quickly after the construction of the superstructure to the appropriate level on any elevation and will follow the superstructure construction to completion.

Six tower cranes are being proposed to construct the sub and superstructure elements of the build. It is with these cranes that the envelope framing systems will be erected at upper ward levels, with mobile cranes being used at lower levels. The erection of decorative finishes will be carried out with a series of mast climbers and MEWP's.

Internal fit-out works are due to commence in August 2016, which will involve first fix mechanical and electrical activities and setting-out of tracks for partitions. The internal fit-out works are planned for completion during April 2018. As the works are being constructed in zones following the construction of the building envelope, the snagging and rectification works will commence in each zone once fit-out works are complete. Zones have been designed so that they can be independently commissioned from one another. With the level of off-site fabrication/pre-fabrication proposed there will be an improvement on programme, quality, safety and also the future maintenance of the building. Additionally this process will reduce the quantity of materials on-site and time-consuming re-attendance of trades.

A significant commissioning period has been allowed for. The commissioning includes for witnessing, demonstrations and training.

Beneficial access to the Health Board will be granted at designated times which are still to be confirmed within the programme to allow fit-out of ICT rooms and various elements of key medical equipment, such as scanners, x-rays and laboratories.

The construction of the new facility is programmed for practical completion for 20th July 2018.

The Hospital opening, taking account of beneficial handover to the NHS for its own programmes of installation, is then planned to be October 2018.

We consider the timescales to be achievable, in order for the programmed opening date of October 2018 it is essential that early works be carried out before FC date of December 2015.

The Construction Contractor has a good track-record of delivering similar scale and types of building to programme, for example the Liverpool Royal University Hospital and Southmead Hospital, which reduces the perceived risk of using new technologies to advantage the Project.

4.1.2. Commissioning Programme

We are in receipt of the proposed Outline Commissioning Programme and accompanying text that will form Schedule Part 12 of the Project Agreement, Outline Commissioning Programme. We are satisfied that a robust and suitably comprehensive

The Outline Commissioning has the following structure:

1. Outline commissioning programme and development of the final commissioning programme
2. Pre-completion commissioning and post-completion commissioning
3. Pre-completion commissioning
4. Post-completion commissioning
5. Completion

Appendix 1 – Outline Commissioning Programme

Appendix 2 – Final Commissioning Programme Responsibilities Matrix

Appendix 3 – Completion Tests

Appendix 4 – Licences/Approvals to be produced by Project Co

Appendix 5 – Documentation Regime for Equipment and the Environmental Post Construction, Commissioning and Transfer

Appendix 6 – Proposed Occupation Plan

Clause 22.1 of the PA states that not less than 12 months before the Completion Date, the Trust shall provide Project Co with a draft of the Final Commissioning Programme as jointly developed by the Trust and Project Co in accordance with the provisions of Clauses 22.2 and 22.3.

The programme will set out the steps necessary, the party responsible, the timing and sequencing.

Commissioning will be split between Pre and Post Completion Commissioning.

Detailed rules for beneficial access are carefully outlined, which will permit access for the Board to install and commission items of Group 2B equipment and items of IM&CT (to include hardware and software).

Project Co shall undertake their Pre-Completion Commissioning prior to the issue of the Certificate of Practical Completion, which will not be incumbent upon the Trust having finished their identified commissioning. Their activities shall include:

- The commissioning necessary to satisfy the Completion Tests
- Obtaining all approvals / licences that are Project Co responsibility
- Reasonable cooperation to the Trust to facilitate their obtaining licences and approvals
- The supply of category A1 Equipment as identified as Project Co responsibility, in accordance with Schedule 13
- The installation and commissioning of equipment as identified as Project Co responsibility, in accordance with Schedule 13
- The commissioning of IM&CT passive network.
- Calibration of mechanical and electrical building equipment and services comprising adjustment and final connection.
- Cleaning as identified as Project Co responsibility
- Training of relevant Trust employees in the use of equipment supplied by Project Co
- Supply and testing of all gases necessary for the purging of medical and specialist gas systems
- Other expressly required commissioning activities prior to Actual Completion Date
- Allow for reasonable access to the Trust, Trust Employees and/or Trust Parties to facilitate service user familiarisation.

It is noted that Project Co has to provide the Board with a minimum of ten (10) business days and not more than eighty (80) business days notification of the commencement of all commissioning activities and tests to give the Board the opportunity to witness as they wish.

Trust commissioning is also identified and relates to:

- The supply of equipment identified as their responsibility, in accordance with Schedule 13.
- The decant of loose or transfer Equipment which is required to be transferred from existing facilities by the trust prior to Actual Completion Date
- The installation and commissioning of the part of the Trusts IT and Telecommunications Systems
- Trust staff training and familiarisation (giving suitable notice to Project Co)

Post Completion Commissioning shall be carried out after the issue of the Certificate of Practical Completion, within sixty (60) business days from the actual Completion date:

- the re-calibration, final balancing, adjustment and final connection, of mechanical and electrical services
- Installation and commissioning of equipment as identified and where supplied by the Trust
- Clearing away any debris, packaging or rubbish caused by Project Co or any Project Party and cleaning the relevant areas
- Complete familiarisation, local induction and fire training, and any completion tests following actual completion date as listed in schedule 12 of the PA.

The Trust Post Completion Commissioning will be carried out after Practical Completion and will relate to:

- Progressive occupation of the facilities and continued training of Trust staff.
- Supply and transfer of the Equipment identified as their responsibility
- The installation and commissioning of Equipment identified as their responsibility.
- Transfer of Board parties and patients into the Facilities.
- Any required Clinical Commissioning identified.
- Cleaning in accordance with Part 2 of Appendix 5 in Schedule 12

- Complete familiarisation, local induction and fire training

Appendix 1 provides the Outline Commissioning Programme which is a table chart which maps out the timings of the testing and commissioning activities. We are satisfied that these have will be able to be aligned with the wider construction programme developed by Carillion. The activities identified cover:

Item	Pre or Post Completion Activity	Activity	Responsibility	Programme Date
		Anticipated Practical Completion Date	Project Co	
1.0	Pre	Trust confirm selection and specification of Category C1, D1, E1, F1 and L1 Equipment	Trust	2 years prior to completion
2.0	Pre	Trust issue draft Final Commissioning Plan (FCP) to Project Co for review	Trust	1 year before completion date
3.0	Pre	Project Co to review/update FCP and comment	Project Co	11 months 10 days before completion date
4.0	Pre	Trust agree FCP	Trust	11 months before completion date
5.0	Pre	Delivery of Category C1, C2, D1, D2, E1, E2, F1, F2, L1 and L2 Equipment to Project Co	Trust	9 months to 1 year prior to completion
6.0	Pre	Project Co Installation & Commissioning of Category C1, C2, D1, D2, E1, E2, F1, F2, L1 and L2 Equipment	Project Co	9 months prior to completion
7.0	Pre	Project Co to confirm training & induction programme	Project Co	9 months prior to Completion
8.0	Pre	Finalise design and works for beneficial access for Category C1, D1, E1, F1 and L1 Equipment rooms	Project Co	6 months to 1 year prior completion
9.0	Pre	Installation of Category C2, D2, E2, F2, and L2 Equipment	Trust	7 months to 1 month prior to completion
10.0	Pre	Final builders & Deep Clean	Project Co	6 months before completion

Item	Pre or Post Completion Activity	Activity	Responsibility	Programme Date
11.0	Pre	Project Co Staff training & familiarisation	Project Co	6 months prior to completion
12.0	Pre	Trust staff training & familiarisation	Trust	6 Months prior to completion
13.0	Pre	Independent testing (IT) & Trust notified of confirmed Actual Completion Date	Project Co	3 months before completion date
14.0	Pre	Category C2, D2, E2, F2, and L2 equipment deliveries	Trust	3 months prior to completion
15.0	Pre	Notify IT & Trust of pre-completion inspection	Project Co	20 days before completion
16.0	Pre	Supply, Installation & commissioning of category A1 Equipment	Project Co	N/A
17.0		Actual Completion Date [1]		
18.0	PC	Completion of Category C2, D2, E2, F2 and L2 Equipment rooms	Project Co	Practical Completion
19.0	PC	Provide Trust with as built building specifications & health & safety file	Project Co	Practical Completion
20.0	Throughout Completion	Delivery / decant of loose Equipment	Trust	Throughout completion
21.0	Post	Snagging notice issued	IT	5 days after completion
22.0	Post	Snagging Category 1 Category 2 Category 3	Project Co	10 days after completions 40 days after completion 6 months after completion

Item	Pre or Post Completion Activity	Activity	Responsibility	Programme Date
23.0	Post	Decant services into new hospital in accordance with the Trust's proposed occupation plan (Error! Reference source not found.)	Trust	9 – 12 weeks after completion
24.0	Post	Installation of Category C3, D3, E3, F3, L2, a Equipment	Trust	2 months after completion not realistic
25.0	Post	Deep Clean	Trust	3 months after completion
26.0	Post	Project Co Complete familiarisation/local induction/fire training	Project Co	3 months after completion
27.0	Post	Trust complete familiarisation/local induction fire training	Trust	3 months after completion

Appendix 2 provides an overview of the proposed Joint Commissioning steering Group taken from the Schedule. The Schedule also provides a description of the different roles and how membership is comprised.

Appendix 3 contains the Completion Tests, which will be used as the key reference point for the Independent Tester in their assessment prior to issuing the Certificate of Practical Completion. We are satisfied that the criteria proposed are suitably comprehensive to ensure a high quality completion.

The Completion Tests are tabulated under the following headings for each column:

- Element of Works
- Aspect
- Project Co Tests/ Evidence
- Supporting Documentation Required (if applicable)

There are a wide range of completion tests. We list the main headings below, which are also accompanied with the range of documentation that would be required.

Element of the Works
Documentation
Health & Safety File
Planning conditions
Section 278 works
Building Regulations
Fire Safety. Compliance with HTM 05-02 & 05-03 / Project Co's Fire Strategy
Health Building Notes (HBN's) related Design Guides and Health Facility Notes (HFN's)
Health Technical Memoranda (HTM's)
British Standards, European Standards, DIN Standards, Codes of Practice, Acts of Parliament.
Radiation Protection Requirement
Air Quality (CSSD, Pharmacy, Clean Rooms) Air quality, Operating theatres
Environmental Health Office (EHO) Approval
Building Structure
Roads and Paving
Below Ground Drainage
External Walls
Internal Walls and Partitions
Windows and External Glazing
Roofs
Ceilings
Doors and Ironmongery
Stairs, Walkways and Balustrades.
Floor and Wall Finishes
Signage and Way Finding
Fixtures and Fittings
Sanitary Appliances and Fittings accessories
Purpose Made Joinery
Purpose Made Metalwork
Carpentry / Timber Framing / First Fixing
Preservative / Fire Retardant Treatment
Landscaping
Engineering Services
Mechanical Engineering Systems
Heat Source and Distribution - Boilers (Steam) Boilers (LPHW) Steam and Condensate

Water Systems:
Hot and Cold water systems
Ionised water
Chilled water systems
Hydrant System
Natural Gas
Ventilation Systems:
Mechanical supply
Mechanical Clean
Extract
Specialist Ventilation Services
Mechanical Dirty Extract
Refrigeration:
Sealed Units
Storage Cabinets
Body Stores
Deep Freeze Units
Cook-Freeze cabinets
Chilled water plants
Cold rooms
Fire Protection Installations
Electrical Services
General Electrical Services
HV Services
Standby Electric Generating Plant and UPS
Lighting Installation
Emergency Lighting
External Lighting Installation
Patient / Nurse Call Systems
Bedhead Services
Communal Radio and Television Networks
Fire Detection and Alarm Systems
Access Control Systems
Security Intruder Alarms / Personnel Attack Alarms
Closed Circuit Television (CCTV)
Lightning Protection Installations
Lifts
Pneumatic Tube Conveyor

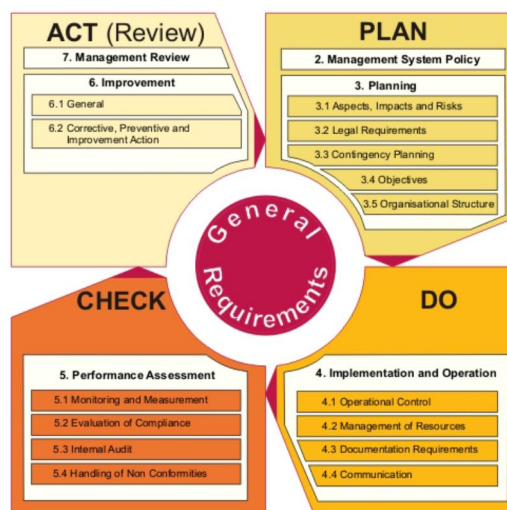
Medical Gases:
Oxygen
Nitrous Oxide
Surgical
Compressed Air
Medical Compressed
Air
Medical Vacuum
Medical Gas
Alarm System
Anaesthetic Gas Scavenging
Laboratory Gases
Liquid Nitrogen
Public Health
Building Management Systems
Renal Dialysis Water Supply
Endoscopy ionised water supply
Structured Cabling:
Outlets
Outlet Cabling
Patch Panels /
Cabinets
Fibre Backbone
(internal)
Fibre Backbone
(external)
Copper Backbone
(internal)
Copper Backbone
(external)
Patch cords only
As fitted drawings
Hub Rooms
Data Network:
LAN Active Equipment
Standards of LAN
Data Link to existing system

4.2. Construction Methodology

Carillion have	Telephone Systems: <i>PABX Central equipment</i> <i>All system extensions for general telephone use.</i> <i>System extensions for facsimile and modems</i> <i>Switchboard consoles</i> <i>Cordless telephony (incl. Base stations)</i> <i>Paging system and all pagers</i> <i>Call information</i> <i>Logging Equipment</i> <i>PC's for operator consoles only</i> <i>Telephony link to existing systems</i>
	Noise and Sound Insulation
	Content of Rooms
	Equipment

provided a detailed construction methodology which we are satisfied indicates that they have appropriately considered the requirements of the site and the delivery of the proposed construction works.

Carillion operates an Integrated Management System 'IMS Policy' known as Phoenix, which is accredited by BSI to be fully compliant with international quality standard, this state's "Carillion's strategic commitment to maintain a dynamic and robust integrated management system. This will ensure that we deliver everything we do in a safe sustainable manner and to a high standard which meets or exceeds our customer's expectations." The diagram below sets out the keys elements of the Phoenix quality control system.



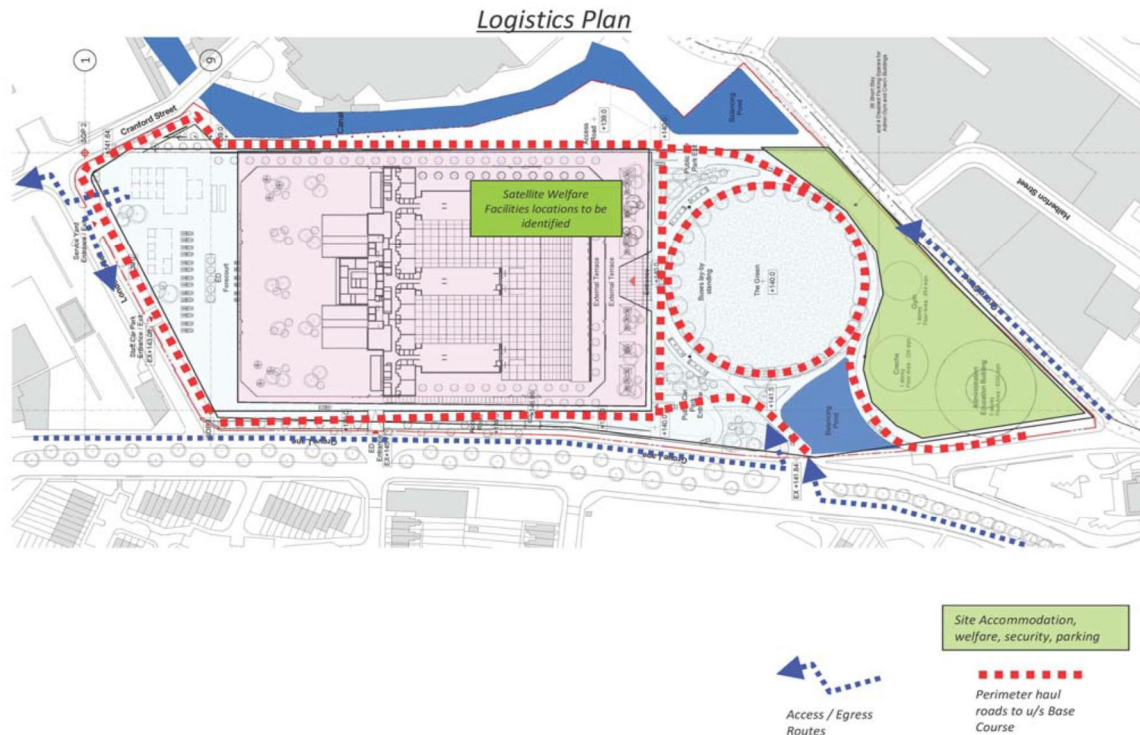
Carillion have provided an exemplar Construction Management Plan (CMP) which is being implemented at the Royal Liverpool University Hospital. The CMP provides a structure to which ensures they meet all legal, statutory and projects standards alongside the expectations of the scheme. A fully detailed CMP for MMH will be issued during the next stage of bidding and will cover:

- Design, design management, document control
- Specialist supply chain procurement
- Construction procedures and offsite procurement
- Product system completion
- Site management and supervision
- Engineering services and logistics

Carillion have provided detail on how they propose to manage the works at each stage across the site considering:

- General site set up.
- Plant Movement and Deliveries: deliveries will enter the site from an access point on Grove Lane to the South-East of the site. A network of haul roads and turning zones will allow deliveries and offloading, exit routes from the site will be afforded from Grove Lane and also London Street. These will be carefully managed and supported by the project Logistics Coordinator within the management team.
- Neighbours: Carillion will nominate a dedicated community liaison manager with clear defined requirements and targets within the role, which will be identified in the Construction Management Plan.
- The security of the site: site will be secured with suitable hoarding system the access gates. Information on site security during the construction phase was limited.
- Early Works Phase: Prior to the commencement of the main building construction, Carillion will carry out a series of 'Early Works' to ensure that the site will be cleared and ready for permanent construction works. Carillion will secure the site boundaries with a suitable hoarding system with access gates from the A457 Grove Lane and secondary access from London Street. Carillion will set up temporary site offices and services to the South-East of the site, shown below, and will remain here for the duration of the project. Carillion will initiate ground investigation and stabilisation of the site, in preparation for piling works. Temporary retained works to boundaries

will also be implemented with retaining wall at London Street and a platform to grove lane to allow for piling works.



- **Site Preparation:** The Trust will hand over the site to Carillion with all remedial works completed. Carillion's first activity on site will be to secure the site and begin Cut and Fill works to the full site.
- **Earthworks sequencing:** bulk earthworks will follow. The levels and location of the building have been designed in line with existing topography of the site to optimise the cut/fill balance for the earthworks, keeping imported material to a minimum.
- **Preparation of compound and logistics routes:** the compound will be located to the South-East of the site, adjacent to Grove Land access/egress route.
- **Piling, retaining wall and ground floor slab:** the building will be founded on a series of continuous Flight Auger piles with concrete pile caps. A continuous piled retaining wall along Grove Lane will be constructed early on to enable cut a fill works. Retaining wall and service tunnel will be installed early in the process.
- **Concrete frame:** in-situ post tensioned concrete structure will form the basis of the building.
- **Site lifting Strategy:** Six tower cranes will be sited along either side of the construction to service the whole site especially upper floor wards. Mobile cranes will be utilised to the lower podium and car park elevations. A series of mast climbers, MEWP's and small roof mounted 'spider' cranes will be erected where appropriate. These will be erected and dismantled to suit the overall programme durations.

4.3. Construction Cost

4.3.1. Introduction

The table below details the current costing level of the new facility:

Element	Cost
Substructure	£11,143,328
Superstructure	£80,182,815
• Frame	£7,226,616
• Upper Floors	£24,157,447
• Roof	£9,919,639
• Stairs	£2,723,320
• External Walls	£19,114,094
• External Windows and Doors	£683,320
• Internal Walls and Partitions	£12,271,227
• Internal Doors	£4,087,152
Finishes	£11,097,449
• Wall Finishes	£2,294,435
• Floor Finishes	£5,002,852
• Ceiling Finishes	£3,800,162
Fittings and Furnishings	£3,913,100
Medical Equipment	£4,941,656
Services	£81,106,046
• Sanitary Appliances	£2,201,492
• Services Equipment	
• Disposal Installations	
• Water Installations	£1,623,000
• Heat Source	£48,359,908
• Space Heating and Air Treatment	
• Ventilating System	
• Electrical Installations	£22,747,679
• Fuel Installations	
• Lift and Conveyer Installations	£4,210,006

- Fire and Lighting Protection
- Communications and Security Installations
- Special Installations
- Builders Works £1,963,961

SUB-TOTAL	£192,384,395
External Works	£9,114,742
SUB-TOTAL	£201,499,136
Bid Costs	£2,892,375
Prelims	£27,612,877
OH&P	£17,508,203
Design Fees	£20,016,035
Risk	£6,873,360
Inflation	£15,400,489
TOTAL	£291,802,476

4.3.2. Provisional Sums

No Provisional Sums exist on the project.

4.3.3. Reasonableness of Construction price

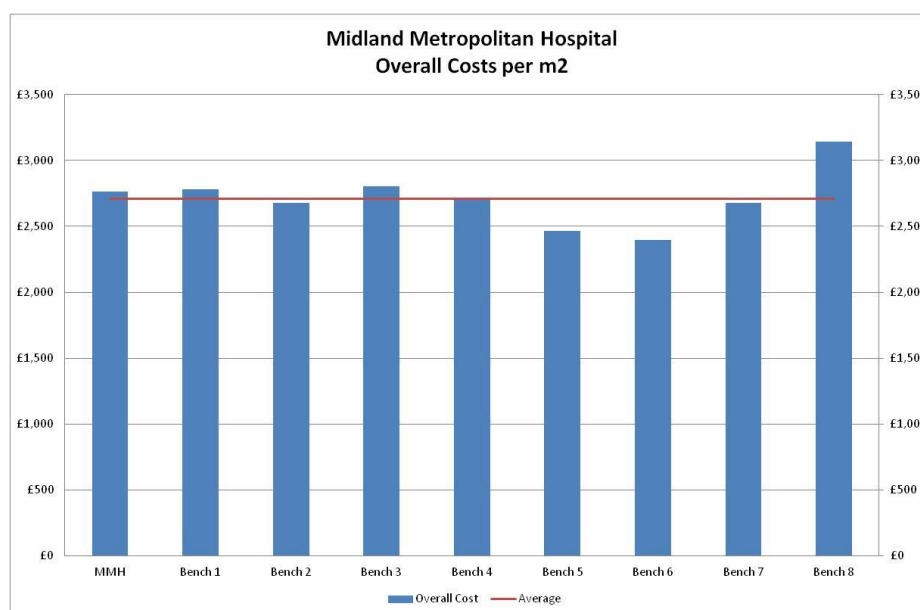
We have undertaken a benchmarking exercise comparing the costs for the MMH scheme against the costs for facilities of a similar nature. All costs have been indexed so they all have a base date of 1Q2014 and have all been adjusted for location factors.

In order to undertake a similar comparison, the following costs have been removed from the MMH costs and benchmark costs:

- Fittings, Furniture and Equipment;
- Car Park costs;
- Off Site Utility Work;
- Overheads and Profit; and

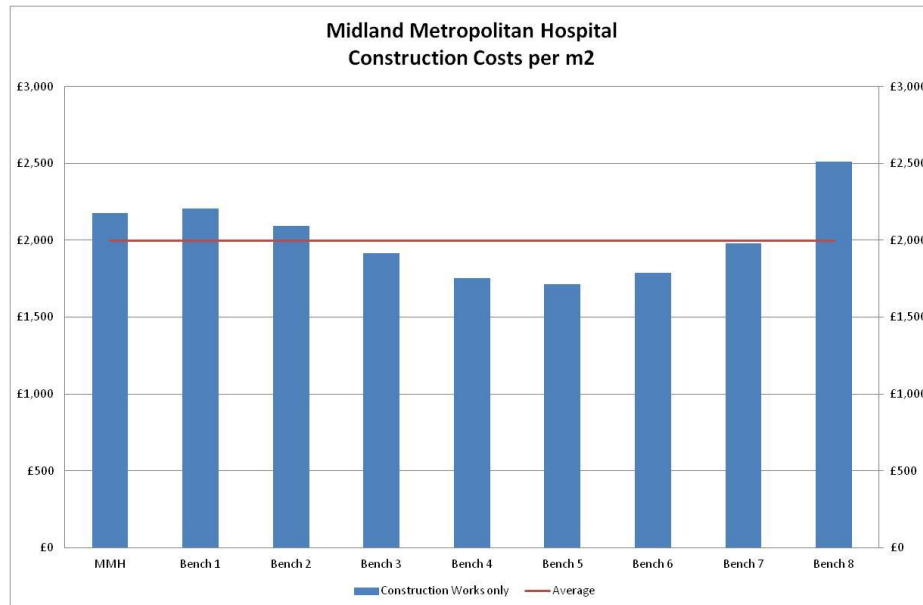
- Inflation.

The chart below shows the total costs for the MMH scheme compared against the benchmark data:



The red horizontal line in the chart above shows the average costs per m² for the benchmark data. It can be seen that the MMH costs per m² are slightly above the average benchmark range, and are at a considerably lower level than the highest benchmark data cost. It is worth noting that the costs for Bench 1 and 2 are for very recent NPD schemes in Scotland which have reached Financial Close within the previous 6 months. The costs for MMH are at a very similar level to these benchmarks which show the costs are reflective of the current pricing market.

Looking at Prime Costs alone (underlying trade costs), the chart below shows how the MMH costs compared against the benchmark data:



Again, the red horizontal line shows the average benchmark range. It is evident that the MMH costs are just above the average benchmark range.

We are therefore comfortable with the level of costs incorporated for the scheme. We are satisfied that costs have appropriately allowed for ground conditions, the nature of the site and the required on-costs.

4.3.4. Potential for Cost Over-runs

Due to the nature of the contract being entered into, the risk of cost over-runs will lie with Carillion Construction.

4.3.5. Level of Contingency

Within the construction costs an allowance of £6,873,360 has been included for risk. This works out at a percentage of 3.57% against the Prime Costs element.

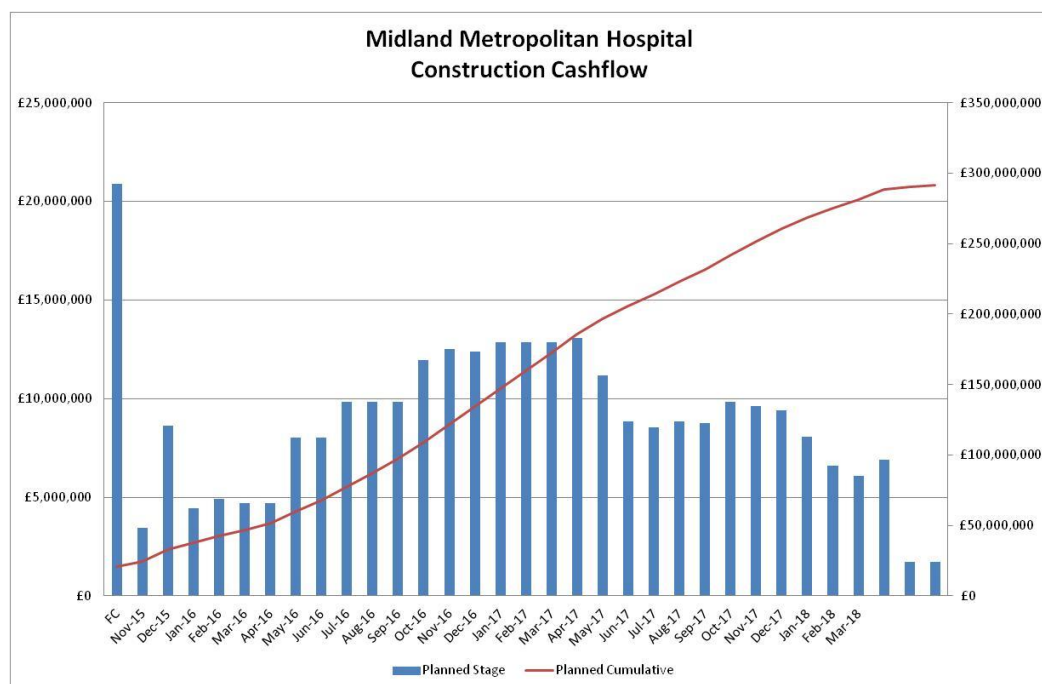
In recent projects, the contingency level has been priced in the region of 2.19% up to 5.19%, with an average of 3.85%. We therefore consider that appropriate allowance has been incorporated for contingency.

4.3.6. Review of Material Components of Construction Price

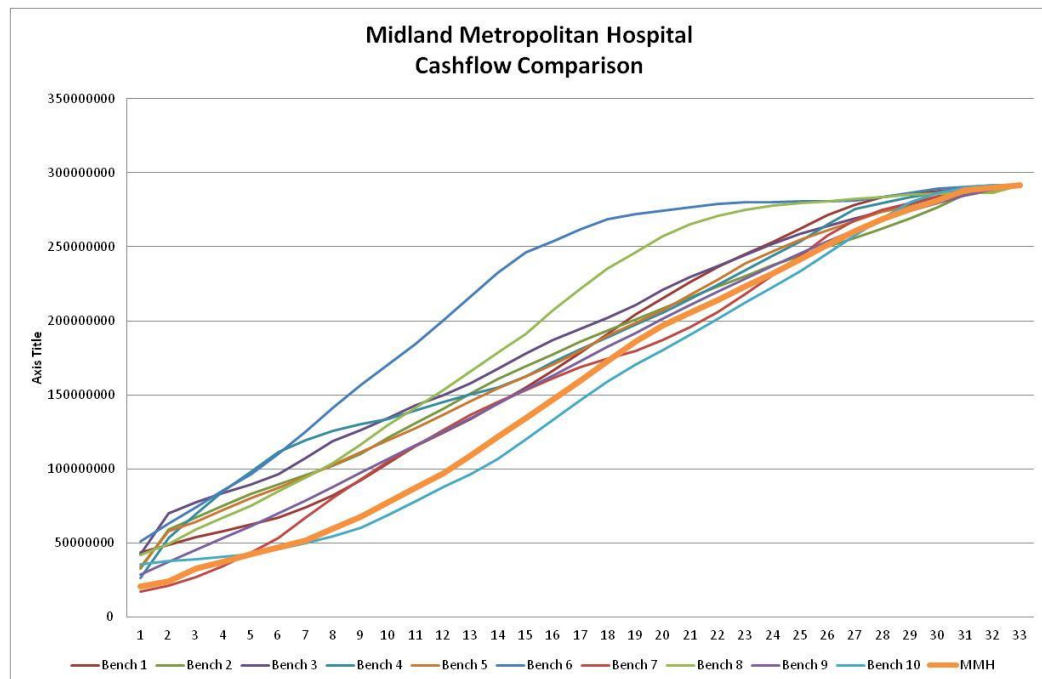
To date, only a high level cost plan has been provided. Upon receipt of a more detailed cost plan and further market testing we will consider the costs in further detail.

4.4. Cashflow

The month-to-month construction cashflow for the project has been provided and we illustrate in the diagram below:



The graph below shows how the cashflow profile compares to other DBFM schemes, adjusting the cashflows to compare to the capex and time periods on this project:



The chart above shows the MMH cashflow profile in bold orange. As can be seen from the graph above, we do not consider the cashflow profile to be front-loaded by comparison to other typical projects.

The cashflow profile has been constructed based upon the sequencing of works proposed by the Building Contractor. We have undertaken a review of the sequence and consider this to be reflective of the construction programme. The image below shows a screen print of the left hand side of the cashflow to highlight how the cashflow has been constructed. Based upon our review, we consider the cashflow profile to be reflective of the construction programme and should not represent any liquidity problems for the Building Contractor.

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5. OPERATIONAL PHASE

5.1. Review of Service Level Specification

5.1.1. Introduction

Schedule 14 of the Project Agreement contains the Service Requirements which establishes facilities management requirements to be achieved by Project Co, through their services sub-contractor, after completion. We summarise below and provide opinion where we feel relevant in relation to particular areas of service delivery.

5.1.2. Board's Requirements

The Service Requirements has the following structure:

PART 1: GENERIC SERVICE LEVEL SPECIFICATION

- Compliance
- Elective Services
- Overarching Requirements
- Interface Services
- Continuous Improvement
- Status of this Document

SERVICES SPECIFICATION

- Scope of Services
- Service Commencement Requirements
- Post Occupancy Evaluation
- Annual Contract Review
- Continuous Improvement and Efficiency
- Management Services
- Project Co Plans
- Customer Satisfaction Surveys
- Staff & Training
- Communications & Contingency Planning
- Health & Safety

- Fire Safety Management
- Quality Management Services
- Environmental Management Services
- General Services
- Helpdesk Services
- Performance Monitoring, Reporting and Record Keeping
- Maintenance
- Statutory Testing
- Replacement of Lifecycle Assets
- Lifecycle Review
- Unprogrammed Maintenance
- Equipment
- Energy & Utilities Management
- Water Quality & Efficiency
- Energy Models
- Energy In Use
- Weather Station Data
- Energy Consumption Risk
- Handback Requirements
- Continuous Improvement
- Pest Control
- Grounds Maintenance
- Small Works
- Elective Services

SERVICE QUALITY STANDARDS

- Buildings
- Systems
- External Site Elements

PERFORMANCE IN USE STANDARDS (PIU)

PERFORMANCE STANDARDS (PS)

- Performance Failures
- Response and Rectification Times

PART 2: SECTOR SPECIFIC SERVICES OUTPUT SPECIFICATION
PART 3: PROJECT SPECIFIC SERVICES OUTPUT SPECIFICATION
PART 4: PROJECT CO PLANS
APPENDIX 1 NOT USED
APPENDIX 2 ELECTIVE SERVICES CATALOGUE
APPENDIX 3 INTERFACE MATRIX
APPENDIX 4 STATUTORY REQUIREMENTS SCHEDULE
APPENDIX 5 MINIMUM LIFE AND RESIDUAL LIFE EXPECTANCY

General Compliance

We note that there is a wide range of general compliance obligations, which we consider to be typical for such a project.

- all relevant Law and Legislation;
- the terms and requirements of this Agreement;
- all relevant Guidance;
- the requirements of this Schedule 14 (Service Requirements) ;
- British Standards;
- Good Industry Practice;
- the Project Co Plans;
- HTM's;
- HBN's;
- HGN's;
- HFN's;
- Building Regulations;
- Fire Safety requirements, specifically including, but not limited to the NHS Firecode;
- The Health and Safety at Work Act 1974;
- Data Protection Act 1998; and
- Environmental Protection Act 1990.

Elective Services

Elective Services are identified in the Elective Service Catalogue. This will also detail the price basis which can include (i) an annual price; (ii) a one off fixed price; or (iii) a unit price. This cost

will be inclusive of all costs for delivering, mobilising and terminating the Elective Services for the minimum period stated. The Trust needs to give a least a 90 day notice or earlier if notified in the catalogue.

The Elective Services Catalogue is outlined in Appendix 2 to Schedule 14, which identifies the following services which the Trust may instruct:

- PAT testing;
- External window cleaning; and
- Internal window cleaning.

Interface Services

We note the requirements for Project Co to prepare an Interface Protocol to be agreed with the Trust, which sets out the allocation of responsibilities between the Trust and Project Co, and will be based on the Interface Matrix in Appendix 3 of this Schedule 14 (Service Requirements). The Interface Matrix identifies the Trust Services and the interfaces between Project Co and the Trust in respect of the delivery of the Trust Services and the Services respectively

Appendix 3 of Schedule 14 outlines the broad requirements for each of the following areas:

Service	Task / Activity	Trust	Project Co
Maintenance	Hard FM		X
	[PAT Testing]		X
Cleaning	Routine cleaning of floors walls etc.	X	
	Graffiti		X
	Internal glazing including windows	X	
	Internal glazing including windows		X
	External glazing including windows		X
	Deep Cleaning (Periodic)	X	
	Deep Cleaning (Catering)	X	
	External Cleaning including Gutters and gullies,		X
Waste	Collection and removal of all waste from the Facilities	X	

	Recycling segregation and collection	X	
Pest Control	Routine and reactive pest control and eradication		X
Security	Guarding, patrols and Key holding	X	
	CCTV Cameras monitoring	X	
	Keys	X	
Grounds Maintenance	Routine maintenance of hard landscape areas including litter picking, leaf clearance etc.		X
	Routine Maintenance of soft landscape areas including grass cutting, horticulture, arboriculture line marking of pitches		X
	Long term Maintenance and Lifecycle of Hard Landscape areas including line marking		X
	Winter Maintenance Tasks including gritting, snow and ice clearance etc.		X
Catering	Provision of Catering, vending and Hospitality	X	
	Catering Equipment use and cleaning	X	
	Catering Equipment Maintenance and Lifecycle		X
Furniture, Fixtures and Equipment (FF&E)	Cleaning of all FF&E		X
	Repair and replacement of Fixed FF&E including any Group A - P furniture		X
	Repair and replacement of Loose FF&E (other than Group A - P)		X
ICT	ICT Passive Infrastructure		X
	ICT Active Infrastructure	X	
	Building related networked and internet protocol based systems		X

Service Commencement

Schedule 14 notes that Project Co has to satisfy to the Independent Tester to support their completion notification that the following matters have been addressed, which are helpful from a Funder's perspective:

- Mobilisation Plan
- Project Co's Staff
- Helpdesk
- Project Co Plans (as below)
- Facilities Handover (including Government's Soft Landings as below)
- Trust Services Training Plan.

The required Project Co Plans are identified as below.

- Interface Protocol
- Service Delivery Plan
- Trust Services Training Plan
- Mobilisation Plan
- Communications Plan
- Contingency Plan
- Health & Safety Plan
- Fire Safety Management Plan
- Building User Guide
- Quality Management Plan
- Environmental Management Plan
- Five Year Maintenance Plan
- Schedule of Programmed Maintenance
- Lifecycle Profile
- Lifecycle Efficiencies Plan
- Lifecycle Schedule
- Energy, Utilities & Water Management Plan
- Energy Efficiency Plan

The Government Soft Landings relates to a recent initiative by the Government "to be used to bridge the gap between expectation and reality by engaging users and operators to review and

comment upon the design, construction, commissioning and handover proposals." Schedule 14 sets out the key components for Services Commencement:

- provide training to Trust Staff;
- optimise the performance of the buildings;
- provide post occupancy checks and controls;
- identify and address all building snags and defects; and
- carry out Customer Satisfaction Surveys

Efficiency Reviews

We note the requirements to undertake Efficiency Reviews every 2.5 years during the Contract Term (each a "Contract Review Date"). "Project Co and the Trust shall conduct a Contract Efficiency Review in order to ensure that the Services and the Facilities are providing a suitable and cost effective solution for the Authority. All savings arising from any Contract Efficiency Review or Annual Contract Review shall be shared between the Trust and Project Co 75% going to the Trust and 25% going to the Project Co."

Service Delivery Plan

Project Co is required to prepare a Service Delivery Plan describing their approach to providing services as the following structure. We consider this to be standard, robust approach. We review the Bidder's Service Delivery Plans later in this report.

- (a) Approach;
- (b) Management, resourcing and communication; and
- (c) Delivery methodology.

The Service Delivery Plan will include, as a minimum, the following sections and contents:

- Management, Resourcing and Communications, including:-
 - organisation chart
 - on and off site management resources
 - roles & responsibilities of key staff
 - Project Co's operational resources

- use of subcontractors
- staff training
- Communications Plan

- Quality, Environment and Health & Safety, including:-
 - approach to quality management
 - Quality Management Plan
 - approach to sustainability
 - Environmental Management Plan
 - approach to health & safety
 - Health & Safety Plan

- Helpdesk Services, including:-
 - helpdesk system details
 - location and staffing
 - operational parameters & protocols

- Performance Management & Reporting, including:-
 - approach to performance management
 - Performance management plan
 - approach to reporting
 - monitoring and measuring Performance Standards
 - monitoring and measuring Availability Standards

- Programmed and Unprogrammed Maintenance (as described at Clause 28 of this Agreement), including:-
 - approach to Programmed Maintenance
 - Planned preventative maintenance plan (in accordance with the Schedule of Programmed Maintenance)
 - approach to Unprogrammed Maintenance
 - operational resources
 - Access Times for Maintenance purposes for each Functional Area/ Functional Unit on the Site.

- Statutory Testing, including:-
 - appointment of a competent person
 - liaison with Insurance Providers
 - record keeping
- Lifecycle Asset Replacement, including:-
 - Lifecycle Efficiencies Plan
 - Lifecycle Profile
 - Lifecycle Review process
- Energy and Utilities Management, including:-
 - Baseline Energy Model
 - energy consumption monitoring and reporting
 - Energy, Utilities & Water Management Plan
 - approach to energy efficiency and waste minimisation

Health & Safety: this is a key area that any Funder is keen to ensure is properly considered. The ITPD appears to provide a robust requirement in the services anticipated. In this section of Schedule 14, Project Co must:

- (a) "Establish systems that acknowledge the receipt from the Trust, and dissemination to all relevant Project Co Parties, all warnings and safety action bulletin notices published by the HSE, DOH, MHRA or any other relevant parties and ensure appropriate action is taken and recorded centrally at Project Co's expense"
- (b) "Develop, maintain and implement a health and safety plan (the "Health and Safety Plan") to demonstrate compliance with all statutory, regulatory and relevant health and safety instruction affecting the management and operation of the Facilities, the scope and content of which is coordinated and agreed with the Trust."
- (c) "Develop and maintain a process to manage any hazardous work at the Facilities the "Permit to Work System", in accordance with Legislation and Good Industry Practice. This will be developed in coordination with and agreed by the Trust."
- (d) "Ensure that at the commencement of each Contract Year a suitably qualified independent safety adviser has reviewed Project Co's health and safety policies and procedures against the Trust health & safety policies and procedures within the last 12 months."

Quality Management Services:

- (e) Project Co is to “develop and maintain an up to date guide (the “Building User Guide”) which will be developed in accordance with Good Industry Practice”
- (f) Project Co will develop, maintain and implement a plan (the “Quality Management Plan”) for the Services that will meet the requirements of ISO9001.
- (g) Project Co will achieve ISO9001 accreditation within 12 months of Services Commencement. ISO9001 accreditation will be maintained throughout the Contract Period and copies of certificates will be provided to the Trust.

Environmental Management Services:

- (a) Project Co will develop, maintain and implement an environmental management plan (the “Environmental Management Plan”) for the Services that will meet the requirements of ISO14001.
- (b) Project Co will achieve ISO14001 accreditation within 12 months of Service Commencement. ISO14001 accreditation will be maintained throughout the Term and copies of certificates will be provided to the Trust.
- (c) Project Co's Environmental Management Plan will contain as a minimum Project Co's approach to:-
 - Providing the Services in a sustainable manner;
 - Minimising waste (including energy and water) during maintenance; and
 - Coordinating Sustainable and environmental policies with the Trust.

Helpdesk Services

“Project Co will provide a Helpdesk service 24 hours per day, 365(6) days a year in respect of the Services.” We are satisfied that the service requirements are typical industry, market requirements.

Maintenance

“Project Co will be responsible for providing maintenance, service contracts, repairs, replacements & preventative regimes to all elements of the Facilities, grounds, structure, fabric, mechanical and electrical services, as well as fixtures, fittings signage and specialist installations and equipment including ICT infrastructure ...” We are satisfied that the service requirements are typical industry, market requirements.

Replacement of Lifecycle Assets

“Project Co will carry out the renewal and replacement of Lifecycle Assets in order to maintain the Facilities in accordance with the Agreement, to meet Availability requirements/Services Quality Standards and in accordance with the Lifecycle Schedule”. We are satisfied that the service requirements are typical industry, market requirements.

Unprogrammed Maintenance

“All elements of the Facilities will comply with the Service Standards, Schedule 8 (Construction Matters), the Handback Requirements and the requirements of manufacturers' original and subsequently amended specifications, guidelines and warranties. Where Faults occur in the Facilities, Project Co will Respond and Make Safe and Rectify such Faults within the Maintenance Service Respond and Make Safe Times and Rectification Times”. We are satisfied that the service requirements are typical industry, market requirements.

Equipment

“To the extent that Project Co is required to maintain Equipment, it will be responsible for supplying, administering and distributing Equipment evaluation records required by the NHS and MHRA in accordance with their required distribution procedure.” We are satisfied that the service requirements are typical industry, market requirements.

Energy & Utilities Management

“Project Co will ensure the efficient, effective, safe and timely supply of energy, utilities and controls (electricity, gas and water, etc.) across all areas of the Site in order to ensure continued operation of the Facilities, 24 hours per day, 365(6) days per year for the duration of the Agreement ... Project Co will manage all Utilities services including but not limited to:

- Water;
- Sewerage and effluent disposal systems;
- Surface water disposal;
- Electricity;
- Gas;

- Fuel oil; and
- Any other fuel proposed by Project Co e.g. Bio-mass fuel.”

We are satisfied that the service requirements are typical industry, market requirements.

Pest Control

“Project Co will provide a Pest Control Service to deliver programmed and reactive pest control and prevention measures. The Pest Control Service will be provided 24 hours per day, 365(6) days per year and Project Co will supply to the Trust each month a report giving a full and complete overview on pest control activity within the site outlining a record of the measures undertaken/reported incidents.” We are satisfied that the service requirements are typical industry, market requirements.

1.1.1. Performance Standards

Service Performance Failures are assessed by consideration of performance against a range of Performance Standards to be set out in Section 6 Part 1 of Schedule 14. There are 31 Performance Standards, which can break down to c. 300 individual elements that can be monitored or assessed from which deductions may arise.

The Performance Standards are set out as follows [though we understand that these are being reviewed with the Trust to improve clarity and interpretation, but this is yet to be forwarded]:

- PS01 - Post Occupancy Evaluation
- PS02 - In use energy model
- PS03 - []
- PS04 – Project Co's Plans
- PS05 - []
- PS06 - Staff Training
- PS07 - Behaviour and Appearance
- PS08 - Staff Competencies
- PS09 – Communications Contingency Planning
- PS10 - Permit to Work
- PS11 - []

PS12 - Communications Plan
PS13 - Contingency Plan
PS14 – Health and Safety
PS15 – Fire Safety Management
PS16 - General Services
PS17 – Quality Management Services
PS18 – Environment management Services
PS19 – Energy and Utilities Management
PS20 - Helpdesk Services
PS21 – Performance Monitoring , Reporting and Record
Keeping
PS21 - Customer Satisfaction Surveys
PS22 – Maintenance
PS23 - Equipment
PS24 - []
PS25 - Small Works
PS26 - []
PS27 - Continuous Improvement
PS28 - Elective Services
PS29 – Glazing cleaning
PS30 – Pest Control
PS31 – Grounds Maintenance

These are set out in a detailed schedule. For each Performance Standard the following elements are identified.

- Performance Requirement
- Performance Failure Category
- Periodic (P) or Event (E) standard
- Remedial Period
- Monitoring Frequency
- Monitoring Methods
- Definition of Failure

We are aware that the Bidder has assessed each of the standards and proposed an approach to proper deliver each. Our preliminary review would indicate that the performance standards have been appropriately constructed to be adequate for delivery, subject to the service delivery proposals of the Bidder.

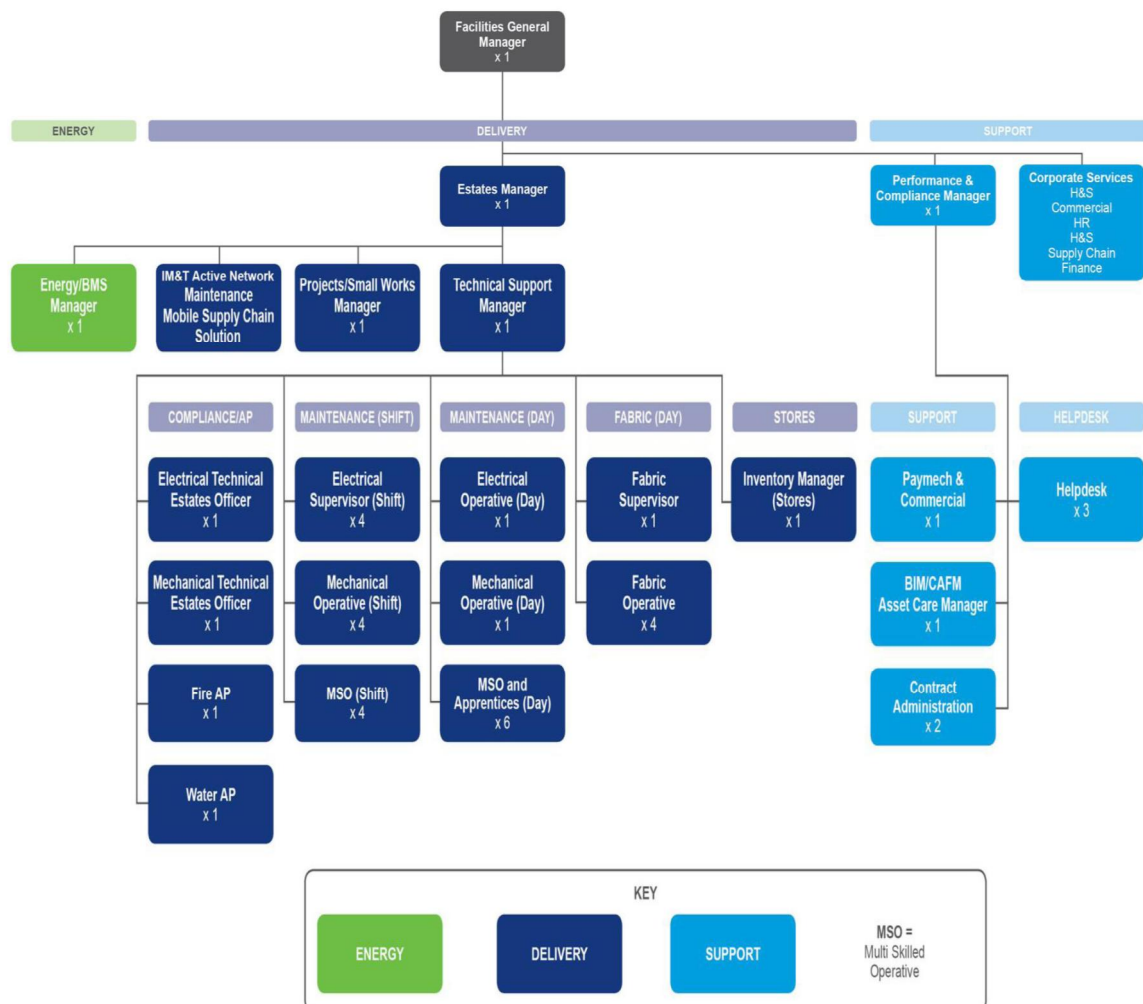
5.1.3. Interim Services

There are no interim services on this project.

5.2. Review of Method Statements

5.2.1. General FM Management & Structure

Carillion will be required to manage the overall FM service including Health & Safety, Fire Safety Management and training as well as to meet all other service performances as described in Schedule 14. There will be a total of 5 managers and 30 ground staff to be employed for delivering all different aspect of services. The indicative structure for the project in terms of meeting the needs and supporting resource plans is shown in the graphic follow.



- Facility Manager: who has the principal responsibility for the FM delivery at the hospital, supported by the Technical Management Team, Support Team and a designated FM team.
- Estate Manager: who is responsible for the day to day management and co-ordination of FM delivery. He/She will be the main point of contact for the Trust and will liaise regularly with all subcontractors.
- Technical Support Manager: whose role is to support the Estate Manager on site and deputise in his/her absence. The Role will have a “hands-on” approach and directly responsibility for daily service delivery.
- Energy Manager: who is tasked to provide the technical expertise in monitoring and targeting energy and utilities consumption.
- IM& T Manager: whose primary function is to support all service requirements in IMT services.
- We noted that Carillion will specifically recruit a Performance and Compliance Manager to take the overall control of performance monitoring, reporting, and the handling and management of performance data. This is considered a good approach for the size and nature of the contract.

Overall, the General Services will be delivered in accordance with relevant rules, regulations, codes of practice and/or British or European Standards as noted in Schedule 14. From information received and meetings held, MAMG Consultancy is satisfied with the management structures and resources proposed. The processes and lines of communication demonstrate a pragmatic approach to service delivery. Based on Carillion FM’s experience in PFI sector, we do not perceive staffing level and resources to be an onerous issue in respect to this project.

5.2.2. Estate & Maintenance Service Delivery Statement

Carillion FM will be responsible for the complete Hard FM services throughout the operational period. The specialist suppliers, under subcontract to Carillion FM, will undertake the maintenance of certain items through a combination of self delivery and sub-contract as below and these are considered reasonable approaches:

- Pneumatic tube system
- Piped Medical Gas System
- Building Maintenance Set

- Fire Alarm System
- Lift

Carillion propose that the Technical Support Manager is a fully qualified engineer with complementary skills and qualifications. The Technical Support Manager and supervisors will be trained and cover Authorised Persons ("AP") requirements with responsibilities for the key statutory maintenance of below systems, which is considered appropriate:

- Piped Medical Gas Systems
- HV and LV electricity systems
- Legionella and ventilation systems
- Confined spaces

Carillion will provide the core FM services including Hard FM through directly employed staff. A team consisting of 20 Building Maintenance operatives has been proposed, who will work on a 24/7 shift system and an extended day shift system covering 7 days per week.

Carillion also proposed to utilise new technologies to support the delivery of the service include:

- Concept Evolution CAFM computerised maintenance system which will provide control of Helpdesk, Reactive task management, Asset management, PPM, Lifecycle and Contract Performance reporting
- Personal Digital Assistants (PDA) for technicians to communicate with the help desk remotely and swiftly.
- Laptop computers with dial-in facilities for duty management and on-call staff where required.

Overall, we consider that the method statement provided is sufficient at this stage of the bid and does not pose any significant risks to the project.

5.2.3. Ground Services Service Delivery Statement

This service provision covers 24/7 maintenance and renewal as necessary of external works (inc roads & footpath), hard surfacing, walls, car park fences, gutters, staircases, trees and hedging, etc. Maintenance standards should ensure the grounds are safe for all users throughout the year. All equipment and consumables are the responsibility of Carillion FM.

Under Carillion Service Delivery Statement, the Technical Support Manager will have responsibility for the Grounds Maintenance Service. They will have directly Carillion staff employed to undertake daily tasks in accordance with the Service Specifications. Their intention is to deliver the service by two full time staff who are competent in Ground Maintenance duties, but who are also multiskilled and be deployed to other duties during winter months if required. MAMG Consultancy considers that this is a practical approach that Carillion can have direct control on services such as re fire exits checking, day to day maintenance. In addition, they will use their supply chain partner Floratec for landscape maintenance, horticultural maintenance and supplement snow and ice clearance duties which is considered appropriate.

Carillion will produce a comprehensive annual maintenance programme allied to a five year maintenance plan to ensure that the site is well developed and maintained to the required standards. This service is considered to be in line with market practice and a low risk item to the project.

5.2.4. Pest Control Service Delivery Plan

Carillion are proposing to directly deliver the services through two Carillion's Multi-Skilled Operatives (MSOs) and a specialist Supply chain partner, Rentokil, working to the legislation that is in place for the standards required. The Technical Support Manager will have the overall responsibility to manage and monitor general planned and reactive pest control tasks on site.

Carillion expresses their interest in working directly with the Trust closely. During the mobilisation period, they are proposing to conduct a full site survey to be carried out. This is to identify potential pest activity and to develop an overall site plan and strategy with the Trust.

MAMG would consider that the proposals are suitable for this stage of the bidding process and no particular issues to be addressed.

5.2.5. Utilities Service Delivery Plan

The hospital is required to maintain the energy use in line with the initial energy model target of 42GJ/100m³/annum. This consumption targets are to be confirmed at PB stage once design solutions are finalised. Carillion proposed the following methods in maintaining and maximising the utilities supplies and systems:

- A Planned Preventative Maintenance (PPM) schedule will be set up by the Technical Support Manager via CAFM;
- Regular inspection of the underground sewage system using CCTV surveys;
- Risk Assessment in water systems including establishing water quality testing, flushing and chlorination regimes;
- Routine inspection of the gas main and any regulators;
- Routine Statutory inspection on oil supply checks;
- Installation of Building Controls and Energy Management Systems (BEMS);
- Using eSight Portal to share all utilities info with the Trust;
- Reviewing Annual Energy and Utility conservation policy with the Trust;
- Re-validate DEC each year;
- Presenting monthly energy performance report;
- Preparing loss of any utility supply with the Trust;
- Updating Energy Efficiency Plan with the Trust; and
- Producing Energy Model.

MAMG Consultancy noted that the full Energy, Utilities and Water Management Plan is not available at this stage and will be developed during the mobilisation phase. Overall, the Service Plan for this type of service is broadly within the standard PFI norms. Overall these should be deliverable by a competent contractor such as Carillion.

5.2.6. Helpdesk Service Delivery Plan

Carillion will utilise a CAFM (Computer Aided Facilities Management) system, Concept Evolution, for the Helpdesk Services. The Helpdesk will be located in Carillion's Experience Centre (CEC) in Sheffield. It is a 24/365 services. Three CEC operators will report to the Performance and Compliance Manager monthly for this project. The core service period will be weekday daytime hours (08:00 – 18:00) answering and logging calls. Outside of these times, this will be covered by the out of hour's operators. Carillion proposed a total of 4.5 FTE for the first three months (as opposed to the steady-state team of 3 FTE) recognising that the new team might working at

a lower speed capability initially. This is considered appropriate and limits any potential risks during the mobilisation period.

MAMG Consultancy is of the view that Concept Evolution has the capacity to handle all task requests and is available for configuration information into a wide variety of reporting formats. It is a user friendly system that comprehensive training can be given. Access permission will need to be controlled, which Carillion will have to discuss with Trust's Representative as part of the mobilisation process.

At this stage MAMG Consultancy is satisfied that the outlined proposals should be sufficient to meet the service requirements.

5.2.7. IMT Service Delivery Plan

Carillion proposed to provide 24/7/365 maintenance support of the active network equipment in a standard "Break and Fix" model through the Trust's IT Helpdesk that redirected to the Carillion helpdesk. . We note that all network configuration tasks will be undertaken by the Trust's IM&T team, with Carillion is only responsible for below scopes:

- Cabling and Wiring changes due to Server/ Equipment's movement
- Site Information and Documentation
- Support the Trust during DR scenarios
- Logging of Tasks into the helpdesk system and inform Network team about the task creation

The response time for this service is required at 4 hours which is deliverable.

Carillion has not developed Business Continuity plan(s) for this Service which needs to be in-line with the design parameters and they also need to further develop Disaster Recovery plans for the network (both active and passive) and related infrastructure in-line with the Trust IM&T policies. These will need to be reviewed at PB stage.

Overall, we consider the requirements are achievable and not presenting an onerous risk to the project.

5.2.8. Service Delivery Plan Summary

MAMG Consultancy has undertaken a review on the scopes of services, compliance standards, specific service requirements, response / rectification times and performance monitoring systems associated with the specific services required in Schedule 14 of the Project Agreement. The proposed Service Delivery Plan is considered to be appropriate and therefore should be achievable by the competent FM Contractor, such as Carillion.

5.3. Facilities Management Costs

5.3.1. Overview

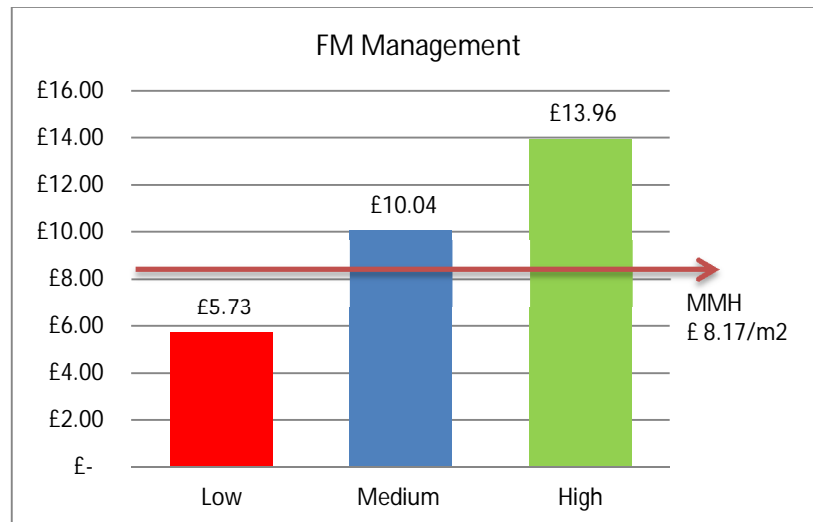
The Facilities Management Agreement covers the Hard FM, i.e. the maintenance of the facility itself (planned and reactive maintenance) and any building associated life cycle replacement. We are in receipt of the following global Hard FM figures. We note that the Hard FM costs are indexed in accordance with RPI and include a c. 4% risk margin.

5.3.2. Reasonableness of Cost

MAMG Consultancy has undertaken benchmark data analysis on comparable health PFI/PPP projects across the UK and for a wide range portfolio. FM costs have been calculated using the agreed metrics and industry standard £/m² per annum format where appropriate. The project costs provided to MAMG Consultancy are based on April 2014 price and West Midlands Regions. We however excluded the central overheads, risk margin in order to ensure our cost database brings the same value references for comparison.

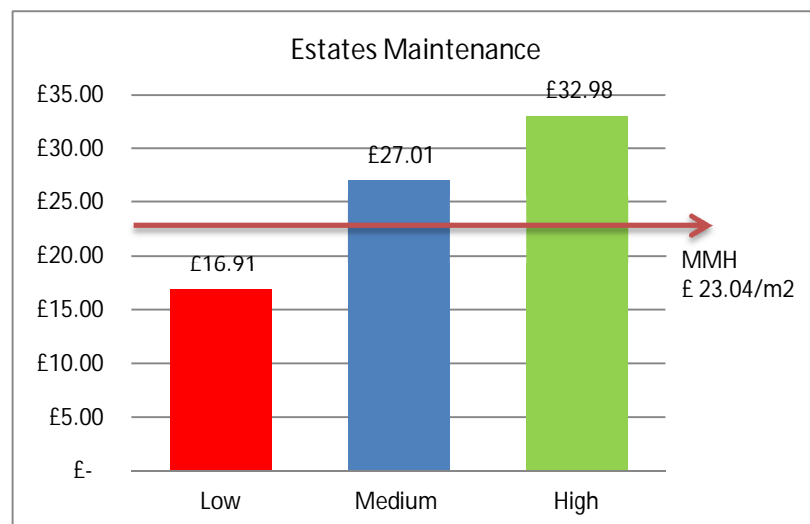
5.3.3. FM Management Cost

This service provides the overall FM management including Health & Safety, Fire Safety Management and training performance. The Service Cost for the service provided is £8.17/m² pa which sits in the Lower-middle quartile of MAMG Consultancy benchmark range and would therefore be a sufficient price to provide a standard service level service, as shown in the graphic below.



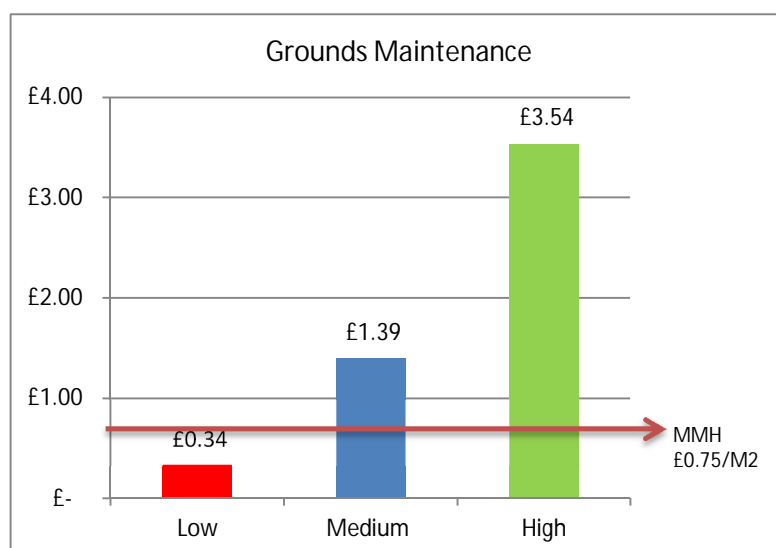
5.3.4. Estate and Maintained Service Cost

MAMG Consultancy considers that the Estate and Maintenance Service cost falls within the lower quartile market range for PFI health projects and appear to be competitive price for this type of service. At this stage we are comfortable with the calculation methodology, and proposed FM costs.



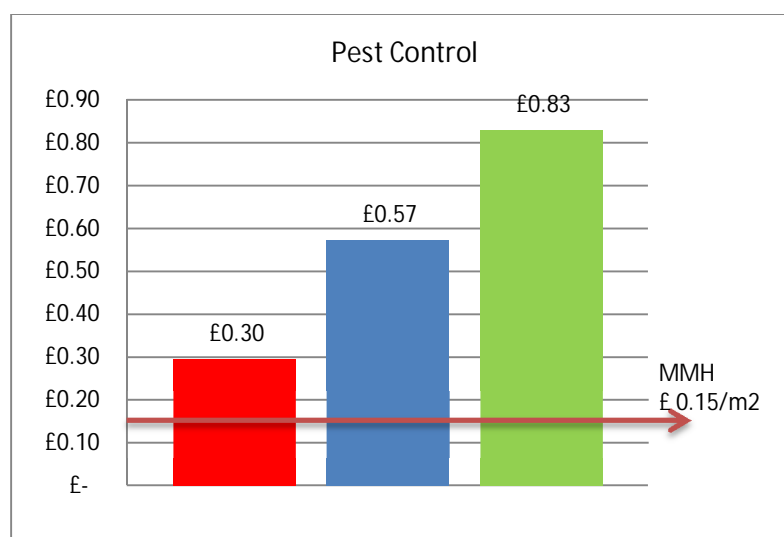
5.3.5. Ground Maintenance Service Cost

The reported Grounds Maintenance Services cost, for the service provided, is £0.75 / m² pa which sits in the lower quartile of MAMG benchmarked range. Overall, MAMG Consultancy would therefore consider the current price is a competitive cost when compared to the market, as shown in graphic above.



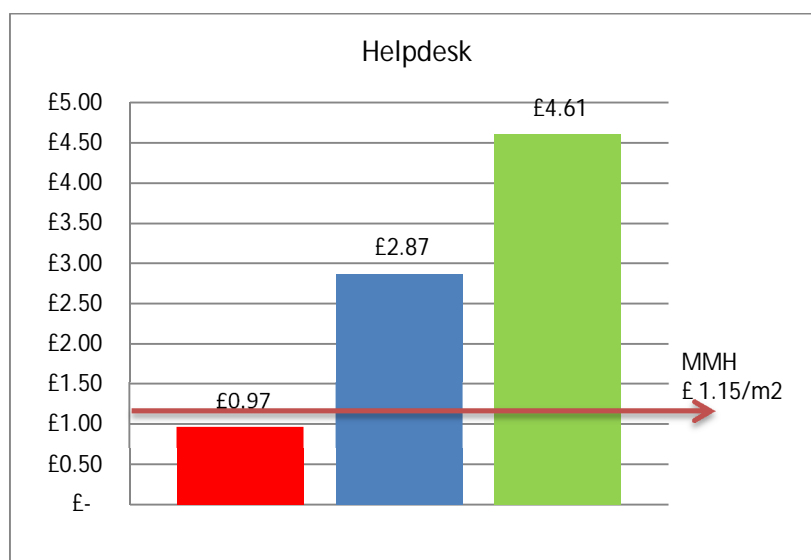
5.3.6. Pest Control Service Cost

The reported Pest Control Service cost, is £0.15 / m² pa which appears well below MAMG benchmarked range. Initially, it was felt that this was a risk item, however we understand that the costs are based on a sub-contract with Rentokil and, further to discussion, that it should be sufficient for the service required and anticipated for the project.



5.3.7. Helpdesk Service Cost

The reported Helpdesk Service Cost is £1.15/m² pa which towards the low end of MAMG Consultancy benchmarked range and would therefore be a very competitive price to provide an average level of service, as shown in graphic below.

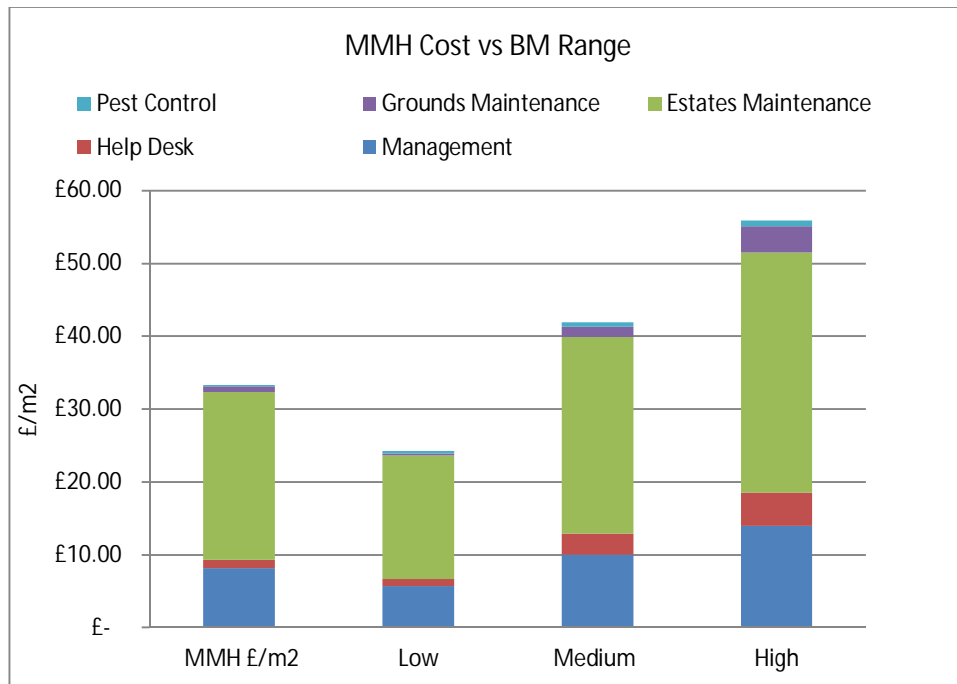


5.3.8. Summary

Based on our high level review of Project Contracts agreed, MAMG Consultancy considers the overall service cost of sits within the lower quartile of MAMG benchmark range. This suggests that the costs at Midland Metropolitan Hospital are providing the economical price, on the basis of an objective and like for like comparison by comparing the standards and prices of the benchmarking services.

General FM Management, Estate, Ground Maintenance and Helpdesk Services are all below the lower-middle quartile of MAMG benchmark range and provides a very competitive price when compared to the market, while Pest Control Service is below the lowest end of the MAMG benchmark range.

MAMG Consultancy notes that Carillion's cost profile does includes another 4% of risk margin allowance of £112.4k, which will offer additional £1.37/m² pa cost but the overall cost remains at the lower quartile of benchmarking range and is considered to be a competitive, though, by consideration of our benchmark ranges sufficient for the delivery of the services.



5.3.9. Start Up Programme/Mobilisation

Carillion FM will have to provide a commissioning programme that includes the building contractors commissioning handover and familiarisation of services to the Trust team. This plan will to be reviewed in detailed during PB stage.

Within Carillion's FM cost model, there is a sum of £1,647,059 allowed for FM mobilization (see table below). This allowance equates to circa 57.9% of the annual FM cost of £2,850,272. In other words, this represents circa additional a 6 additional FM monthly service charge prior to the Service Commencement Date and MAMG Consultancy therefore considers that to be an adequate sum for the proposed FM mobilization.

Recruitment Costs	58,824
Training and Associated Cover Costs	117,647
Additional Training Cover Costs	
Temporary/Agency Labour Costs	
TUPE	
Other (Please specify)	
Staff Costs Sub Total	176,471
Non Staff Costs	
Start up Costs (full details of costs to be provided, suggested headings include)	
FM Management Mobilisation Costs	529,412
IT Systems Costs	352,941
Helpdesk Costs	58,824
FM Equipment	117,647
Bid Costs	411,765
Non Staff Costs Sub Total	1,470,588
Total	1,647,059

6. LIFECYCLE REVIEW

6.1. Introduction

The life cycle fund will rest with Project Co. The Hard FM provider, though their service agreement with project Co, shall apply for funding of completed life cycle works with Project Co taking liability for the sufficiency of the fund.

The Hard FM Provider shall be responsible for the preparation of the Schedule of Programmed Maintenance, the Schedule of Lifecycle Replacement and the five (5) Year Maintenance Plan.

Project Co will pay the FM Provider to undertake Lifecycle Replacement works. Project Co retain sufficiency risk of the funds required for Lifecycle Replacement.

CI 28.15 to 28.20 of the PA outlines the approach managing the Lifecycle Profile and Lifecycle Spend, including any Lifecycle Surpluses.

We also note that:

- Handback is to be in accordance with Estates Code Condition B with a minimum residual life of 5 years for building elements; and
- Design Life for the building elements and systems is out lined in the Trust Construction Requirements, Schedule 8 to the Project Agreement.

6.2. Design Life and Replacement Assumptions

We are in receipt of the life cycle model used to support the costs proposed for the full project term, at base date of £54,608,104. The model is based on a detail construction cost breakdown and appears to be a standard model: for each element the following is established and is used to profile the possible life cycle spends each year:

- Year of first replacement;
- Replacement year: minimum, maximum, average; and
- The percentage of the identified element construction cost for the replacement.

The Trust Construction Requirements gives the expected design life for elements of the building, refer our comments in Section 3.11. We are satisfied that the LCC model has been prudent in replacement cycles and amounts to support these requirements. Some key elements are noted below.

- External Wall Finishes 25 years

We note that the life cycle model highlights the cladding replacement allowances as commencing in year 25. Curtain walling replacement starts in year 20, which we consider to be a prudent approach, even though the design life may be 25 years, and will cover for any general repairs.

- Roof Coverings 30 years

We note that allowances appear throughout the term, which we consider to be a prudent approach to support any general unprogrammed maintenance and repairs.

- Internal Walls and Partitions 30 years

Similarly, allowances for unprogrammed maintenance has been allowed, plus allowances towards the end of the 30 year project term, which may be used to support the handback requirements.

- Doors and Internal Finishes 15 years

From year 10 internal doors has a repeating amount which can be used for general replacement and repair as required. Similarly, internal finishes

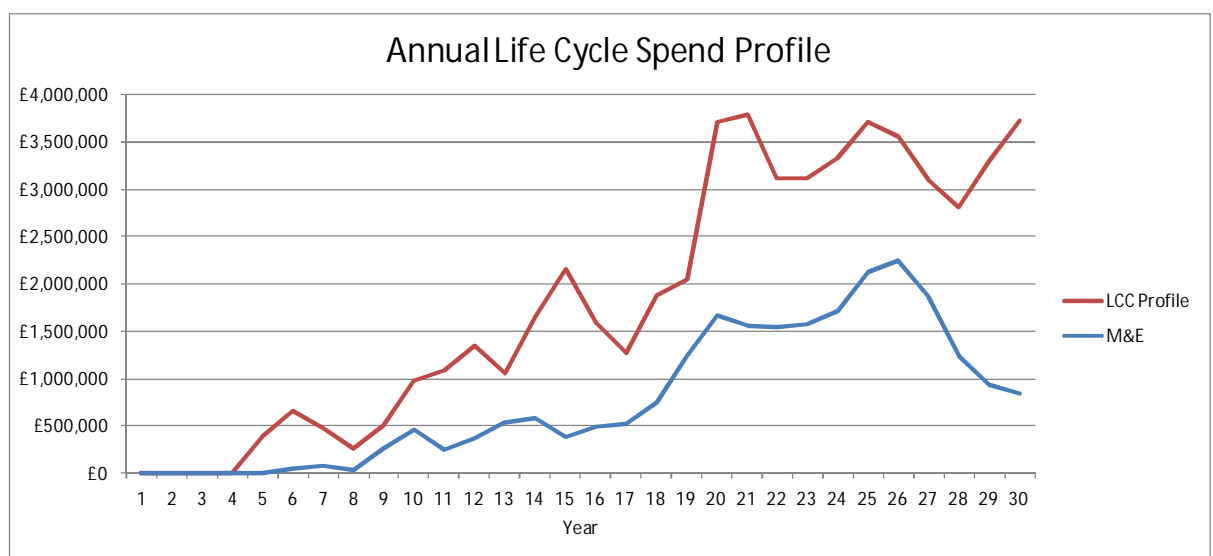
Internal finishes maintenance and redecoration have been split to different finishes for floor, wall and ceiling, with appropriate periodic and cyclical replacement.

- Internal fixtures and fittings 15 years

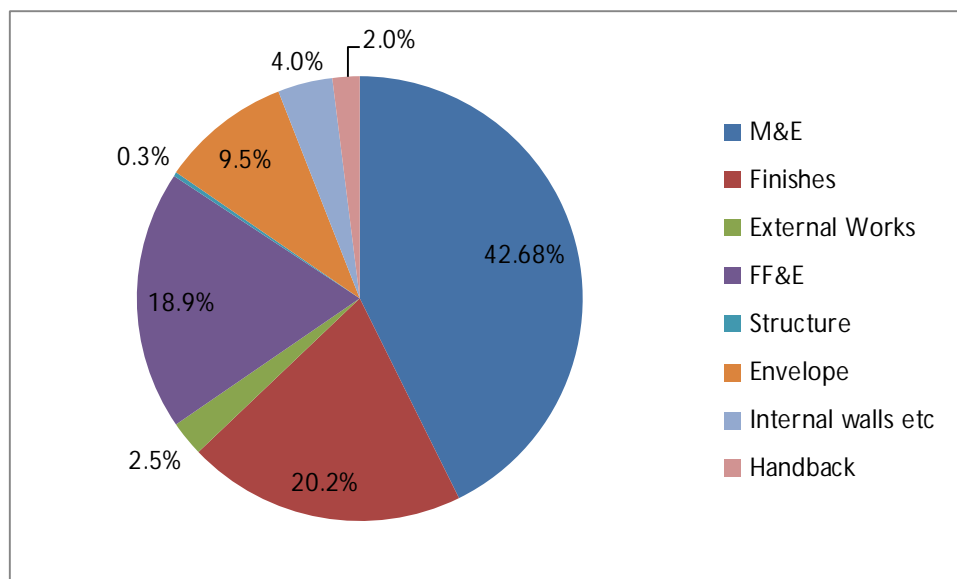
We note that category A1 and A2 equipment has been life cycled appropriately, with all other FF&E aligned with potential 15 year cyclical replacement

- M&E Systems Generally 10 -30 years

M&E replacement is always a key area of focus for the life cycle fund. We are satisfied with the assumptions made in the LCC model. We illustrate the provisions made for M&E replacement in the graph below showing the staged annual capital replacement spend for the overall fund and the M&E by itself. It can be seen that a level of 'maintenance' spend is on-going to year 17, with increasing amounts to year 20, which continues at a high level up to year 27, to support the potential up-grades, repairs and replacements requirements. We consider this typical for the type of systems being considered here.



We also illustrate the spend on different elements of life cycle model.



We note that that the life cycle fund has no spend identified in years 1 to 4 [query to clarify]. This is a common approach, though it may put some pressure on project co in the early years for unprogrammed works that are above the maintenance thresholds.

M&E occupies c. 43% of the fund, which we consider to appropriately reflect the potential M&E replacement requirements.

Both finishes and FF&E take up c. 20% each of the fund, which we think is a very helpful consideration to support the maintenance of the day-to-day condition of the facility.

We note that c. £1m is set aside in the last three years in relation to achieving the required condition B and handback works as PA Schedule 24, Handback.

Our review of the modelled level of spend against each element, and the frequency of anticipated spend over the 30 year operational phase, would indicate that an appropriate approach to the likely spend has been developed.

6.3. Maintenance Threshold & Life Cycle Surpluses

Maintenance Threshold

The Services sub-contract indicates that 'Lifecycle' is defined as:

- the periodic redecoration and capital replacement of the buildings, plant, equipment and infrastructure forming part of the Facilities referred to in Part 1 of the Outline Lifecycle Schedule as more particularly described in Part 2 of the Outline Lifecycle Schedule [we will review in detail when available at next stage]; and
- in respect of any other building, plant, equipment, or infrastructure forming part of the Facilities but not included in the Outline Lifecycle Schedule, the periodic redecoration and capital replacement of all such items having a design life of more than three years (as demonstrated by the Service Provider by reference to objective evidence) and an anticipated Actual Lifecycle Cost of more than £500 (indexed in accordance with RPI) but excluding all consumable items such as lamps, filters, lubricants, seals and seasonal planting.

We consider this definition of 'Lifecycle' to be appropriate with both an outline of the types of works and a monetary threshold. The monetary threshold is relatively low, which may put some pressure on the early stages of the life cycle fund [refer query above about years 1 to 4]

Lifecycle Surpluses

CI 28.15 to 28.20 of the PA outlines the approach managing the Lifecycle Profile and Lifecycle Spend, including any Lifecycle Surpluses, which will allow the Trust to receive potentially 50% of lifecycle surplus at expiry. In summary it requires the following:

- Each year Project Co shall deliver to the Trust a proposed Lifecycle Schedule, together with a report on any differences between the Lifecycle Profile and Lifecycle Spend for the previous year and a prediction of any differences between the Lifecycle Profile and Lifecycle Spend for the following year.
- Project Co must give the trust access to all life cycle related records, receipts, invoices, reports, drawings, technical specification and performance logs
- At every life cycle review date (5th, 10th, 15th, and 20th anniversaries of Service Commencement and the Final Survey Date, which the Trust may undertake prior to expiry in accordance with Schedule 24), Project Co is to submit to the Trust:
 - a survey of the state and condition of the Facilities;
 - a revised projection of Lifecycle Assets in respect of:
 - the period until the next Lifecycle Review Date; and
 - the period until the Expiry Date;
 - confirmation of any differences between the Lifecycle Profile and Lifecycle Spend, with explanation and a log of all surpluses already accrued;
 - confirmation of the Lifecycle Profile for the Lifecycle Period up to the next Lifecycle Review Date and any potential Lifecycle Surplus in that period;
 - confirmation of the Lifecycle Profile from that Lifecycle Review Date to the Expiry Date and any potential Lifecycle Surplus in that period;
 - a summary of how Project Co has achieved the Lifecycle Efficiencies Plan in the period since the previous Lifecycle Review Date; and
 - a log of all accrued savings generated from any relaxation of maintenance requirements in accordance with Clause 49.2 (*Handback Procedure*) in respect of the period to the Expiry Date.

- On the Lifecycle Review Date on the Final Survey Date, Project Co and the Trust the Parties shall also consider and agree a prediction of likely Lifecycle Surplus at the Expiry Date. The Trust shall from the Final Survey Date until the Expiry Date deduct from each monthly Service Payment due to Project Co (1/36) of the predicted likely Lifecycle Surplus. On the Expiry Date, the Parties shall compare the Actual Lifecycle Surplus with the Lifecycle Surplus predicted.
- The overall amount which has been deducted from the monthly Service Payment (1/36 of predicted amount for 3 years) shall be deducted from the Trust's share of the Actual Lifecycle Surplus which, on Expiry, shall be 50%. If the result is a positive sum then Project Co shall pay the Trust such amount. If the result is a negative sum, then the Trust shall pay Project Co but not more than the aggregate of amounts deducted, i.e. the 1/36 per month over 3 years.

[Inclusion of Schedule 24 works - this is being clarified]

6.4. Maintenance Reserve Account

The life cycle funds, as is normal for such agreements, has in place a Maintenance Reserve Account (MRA) within the Financial Model. This has been calculated against the following three years of spend:

- 100 per cent of the forecast costs to be incurred over the twelve month period immediately following that date;
- 67 per cent of the forecast costs to be incurred over the twelve month period immediately following the period referred to in the first bullet point above; and
- 33 per cent of the forecast costs to be incurred over the twelve month period immediately following the period referred to in the second bullet point above.

This has two effects: (1) smoothes the life cycle for the Financial Model, bringing potential funding earlier, and (2) offsets the technical risk associated with unanticipated early replacement.

We have experience of other projects where the MRA has been profiled with assumptions that are similar to this project and not as good as this project, and hence we consider this project to have an acceptable structure, e.g.

- Dumfries & Galloway Royal Infirmary, 100% of next year, 66% of following and 33% of the next
- Southmead Hospital, 100% of next year, 66% of following and 33% of the next.

- NHS Lanarkshire Health Centres, 100% of next year, 50% of the next.
- Northampton Mental Health Hospital: 100% of next year, 50% of following and 25% of the next.
- Essex BSF: 100% of next year, 50% of following and 25% of the next.
- Blackburn BSF: 100% of next year, 50% of following, and 0% of the next.

Based on the above, and our experience in other projects, we would suggest the MRA here to be satisfactory.

6.5. Benchmarking

We are in receipt of the detailed lifecycle model to enable us to check the replacement assumptions and percentages refer above. We have been provided with the base cost model, which matches the resultant profile proposed by the model provided. The Bidder has indicated lifecycle costs as follows:

Project	LCC Fund total	LCC rate (£/ m ² pa)
Midland Metropolitan Hospital	£54,608,104	£22.13

The pricing has a base date of 1 April 2014. We compare the above rate with our internal benchmarks of similar healthcare PFI projects, all indexed from their respective base dates with RPI.

Ref	Capex (£m)	Area (m ²)	LCC Rate (£/m ² pa)
1	156	52,109	22.18
3	178	69,395	22.06
4	134	71,434	22.54
5	198	93,936	24.98
7	255	148,591	23.69

Average	23.22
Minimum	22.06
Maximum	24.98

This gives a general range of c. £22/m² per annum to c. £25/m² per annum, with an average of c. £23/m² per annum. This indicates that the pricing here is within benchmark but towards the lower end of our benchmark range.

We note that Carillion have compared the rate hear against Royal Liverpool project which adjusted gave a rate of £23.59.

We are satisfied that the lifecycle costs proposed are competitive but feasible and appropriate to the project, reinforced through the detailed modeling to support their pricing.

7. FINANCIAL MODEL REVIEW

7.1. Construction

[Final Report QA of inclusion of technical costs]

7.2. Facilities Management

[Final Report QA of inclusion of technical costs]

7.3. Life Cycle

[Final Report QA of inclusion of technical costs]

8. PAYMENT MECHANISM

8.1. Introduction

We are in receipt of the draft Schedule 18 to the Project Agreement which comprises the Payment Mechanism for the operational phase of the project. We outline the key components below.

8.2. Calculation of Service Payments

Monthly Service Charge

The Monthly Service Charge (MSC) is calculated by taking the Service Charge for the Contract Year and dividing by 12. The Service Charge (SC) is indexed each year through an 'Unindexable' and two 'Indexable' elements:

- Unindexable element – usually reflect the debt service element of the SC.
- Indexable Labour Element – labour element of operational service, e.g. FM, life cycle, SPV management, etc.
- Indexable Non-Labour Element – all other non-labour costs relating to the operational service.

The Indexable Labour Element is indexed annually with RPI on 1 April, based on preceding February index.

[Note that Clause 2.2 refers to Clause 2.3.2 for indexation of INLE, which states not used.]

Elective Services Charges (whether event or annual fee) are also indexed annually with RPI. The contents and the prices of the Elective Services Catalogue will also be regularly reviewed to keep relevant. The Trust may also, but not more than every two years, require market testing of the prices.

Deductions

Each month deductions and adjustments may be made to the MSC. The payment mechanism identifies this as relating to:

TUDn-1 - "Total Unavailability Deductions" in month n-1;

SPDn-1	-	"Service Performance Deductions" in month n-1;
RDn-1	-	"Reporting Deductions" agreed or determined for Contract Month (n-1);
PTCn	-	"Pass Through Costs" for month n;
EScn	-	"Elective Services Charge" for month n;
SIAn-1	-	"Step-In Adjustment" – this relates to the cost of Trust step in under Clause 29.6 and 29.7 of the PA.
OSOAn-1	-	"Other Set Off Amount", i.e. anything else the Trust has a right to set off under the contract.
GS	-	"Gainshare Adjustment" relating to utilities and emissions.
PS	-	"Painshare Adjustment" relating to utilities and emissions.

Reporting

Five Business Days following the end of the month Project Co shall submit a report to the Trust. This Monthly Report is to include:

- Summary and report and list of all incidents reported to helpdesk, including details.
- Assessment of all notifications that could potential trigger unavailability, including details such as Areas affected, duration, response, if not unavailability – why not, etc.
- Service Performance Deductions

The Annual Review Report and Monthly Report require the following under Para 16 of the Payment Mechanism

Reporting Requirement		Monthly Report	Annual Review Report
1.0	Performance Monitoring		
1.1	Helpdesk Calls in period	Detailed report	Summary report
1.2	Measurement of performance against Performance standards	Detailed report	Summary report
1.3	Helpdesk performance	Detailed report	Summary report
1.4	Details of any recurring helpdesk calls where further action is required	Detailed report	Summary report
1.5	Details of defects reported in period	Detailed report	Summary report

2.0	Programmed Maintenance		
2.1	Summary of Planned maintenance carried out in period	Details of Planned Maintenance tasks completed in month	Summary of Planned Maintenance tasks for year
2.2	Future Planned Maintenance for discussion and agreement	Next month's planned maintenance tasks	
2.3	Schedule of Programmed Maintenance	Update Schedule	Annual Schedule
2.4	Maintenance spares being held on site	Review of stocks	Annual summary
3.0	Lifecycle		
3.1	Five year Lifecycle planned work / spend	Lifecycle work planned / completed this month	Five year Lifecycle plan update
3.2	Lifecycle progress against agreed plan	Lifecycle work planned for next month	Review of Lifecycle works to date against plan
3.3	Lifecycle reconciliation	Lifecycle works planned / completed	Review of Lifecycle works to date
4.0	Utilities Energy		
4.1	Utilities Consumption Summary	Detailed meter reading and consumption report	Annual summary report
4.2	Energy Targets Reviewed	Tracking performance against target	Summary of annual performance against target

4.3	Energy initiatives for discussion	Current and new initiatives	Review of initiatives
5.0	Quality Management		
5.1	Audits & Inspections	Audits carried out during month	Annual summary
5.2	Supply Chain Reviews	Supply chain performance issues	Annual review of supply chain
6.0	Contract Management		
6.1	FM / SPV Personnel changes / training	Changes during month	Summary of annual changes
6.2	Project Co's Annual Service Report		Summary Report
6.3	Small Works Catalogue	none	Revise catalogue
6.4	Elective Services Catalogue		Revise Catalogue
6.5	Continuous Improvement initiatives for discussion	Current and new initiatives	Review of initiatives
7.0	Health & Safety		
7.1	Accidents in period	Report for month	None
7.2	Accidents in Contract Year	none	Annual accident summary
7.3	Health & Safety Updates	Review of changes	Summary of changes
7.4	Health & Safety Review	none	Overall Health & Safety performance review
8.0	Financials		
8.1	Performance Deductions in period	Detailed report	Summary report
8.2	Unavailability deductions in period	Detailed report	Summary report

We note that Retrospective deductions can be made where a failure has not been recorded in a Monthly Report.

8.3	Payment notices / invoices raised in period	Current invoice cycle	Financial summary
8.4	Change notices and costs in period	Detailed report	Summary report
8.5	Operating costs in period	Detailed report	Summary report
	Appendices		
A	Minutes of last meeting		
B	Helpdesk data		
C	Snags and Defects report		
D	Energy consumption & efficiency data		
E	Schedule of FM deliverables		

Clause 3.3.1 states that should the reporting requirements not be met, Deductions in the Contract Month shall be calculated on the basis of all Areas Unavailable during the contract month. Then recalculated as required once the report is satisfactorily provided. Whilst this seems an extreme measure on one hand, it can be managed out, as it not that the contents are agreed, but just provided and the report can then be followed up to rectify.

8.3. Deductions from Monthly Service Payments

Unavailability

The Trust has the right to issue a Trust Unavailability Notice (oral, with written confirmation reasonably after, or in writing) to the Helpdesk/Project Co Rep should they believe that Availability Criteria in an Area have not been met in an Area. This will state the fault, the Area and the reasons. Project Co is also obliged to report any observed Unavailability.

Project Co shall orally or in writing if they agree or disagree with any Trust Unavailability Notice, however, should the parties remain in disagreement, then the Trust's view will prevail subject to Dispute Resolution Procedure.

Once notified to Helpdesk, that becomes the Logged Failure Time and within one hour Project Co specifying the cause, rectification plans, period to temporarily or permanently fix and if any reason under (Para 4.7) that there such unavailability will not result in a deduction. Situations where no

deductions are made are listed as follows. We consider this to be a typical list that should cover the appropriate situations.

- Trust Default;
- Single stage or two stage variation as Schedule 22;
- Qualifying Change in Law;
- Emergency no caused by Project Co;
- Maintenance work as the Schedule of Programmed Maintenance;
- Utilities or statutory undertaker;
- Trust request/instruction;
- Compensation Event;
- Trust step-in; and
- Act, omission or breach of a Trust party.

Unavailability Criteria

These are defined as follows, from Para 9 of the Payment Mechanism, and, whilst in an inconsistent order, we consider to be standard for such a project. There is also reference to any other criteria identified in the ADSs (Area Data Sheets) [We will review the development as RDS etc are finalised].

To classify as Available, the Area (other than Areas which are pathways, roads, car parking or other outdoor areas) must:

- exist;
- accessible;
- substantial damage;
- temperature;
- illumination;
- electrical supplies;
- ventilation;
- hot water;
- cold water;
- compliant with Legislation, incl. fire, health and safety, safeguarding and security legislation;
- permanent structural elements and fabric to enable the delivery of the Clinical Services;
- free from flood, weather penetration and damp;
- operational security system;

- operational alarm/emergency communication systems;
- sewage and drainage system;
- gas supplies;
- noise levels;
- furniture, fixtures and equipment;
- information technology or telecommunications; and < 15% failure of the network outlets; and
- drinking water.

For Areas which are pathways, roads or other outdoor areas to be deemed Available, such Areas must:

- exist;
- surfaced [as TCRs];
- drainage system;
- functional lights;
- equipment;
- compliant with all relevant Legislation, including health and safety and security legislation; and
- be accessible.

Car parking and roads are as outdoor areas above plus having markings which are clearly visible in the absence of snow and ice.

Duration of Unavailability

Should an event of Unavailability be “Responded to and Made Safe and Temporarily (or Permanently) Rectified by the end of the Temporary Rectification Period and / or by the end of the Permanent Rectification Period as applicable”, then no deduction shall be made. The structure of Relevant Sessions, which define the duration of an Unavailability event are standard and as follows:

- Should a Temporary Rectification Period be met, but not the permanent, then the duration starts from the end of the Temporary Rectification Period.
- Should a Temporary Rectification Period not be met, but the permanent one is, then deductions accrue for the sessions up to the permanent rectification.
- If neither the temporary or permanent rectification period be met, then deductions will accrue for each session until permanent rectification.

If access is prevented for 2 or more hours in a Relevant Session then that session (a Session is every four hour period) will not be counted for deductions. Also, the Trust is obliged to reasonably give access.

Project Co shall notify the helpdesk when it believes either Temporary or Permanent rectification has been properly achieved - this will become the Logged Temporary Rectification Time. The Trust has the right to inspect and dispute this within certain time frames.

We note that there shall be no Rectification Period for any Unavailability which occurs within three days of the Rectification of a failure in respect of the same Availability Criteria in the same Functional Unit caused by a re-occurrence of the same event.

The payment mechanism does give the option for Project Co to offer alternative accommodation, which the Trust does not have to accept, but must act reasonably in considering. Project Co need to provide a detailed Relocation Plan. All availability and performance requirements will remain. Alternative Accommodation, however, is often considered cost prohibitive should it be required.

Unavailability Rectification Period

Temporary and Permanent rectification periods for Unavailability are outlined in Para 11 of the Payment Mechanism as follows. We are satisfied that the arrangement and competency of the FM solution will appropriate / reasonably address these requirements.

"The Rectification Time for an Unavailability Event is 4 hours. However, Project Co can implement a Temporary Rectification. Should a Temporary Rectification be implemented within the time detailed in the table below then additional time will be allowed for a Permanent Rectification as shown in the table below.

Rectification Priority	Description	Make Safe Period	Temporary Rectification	Permanent Rectification
Emergency	An Unavailability Event that gives rise to an immediate threat to	30 Minutes	1 hour	24 hours where a Temporary Rectification has been carried out within 1

Urgent	An Unavailability Event that causes disruption to the Trust, Trust Service Providers or Users but does not give rise to a	30 Minutes	2 Hours	48 Hours where a Temporary Rectification has been carried out within 2 hours.
Routine	A Performance Failure that is neither Urgent nor	1 hour	4 Hours	7 Days where a Temporary Rectification has been

Calculation of Unavailability Deductions

Unavailability deductions are calculated for each event in accordance with the following formula:

$$D = ((SCn) \times [1 + CCAF]) / (Ny \times 6)) \times AW \times UW \times DP$$

SC is the annual Service Charge which is adjusted by the CCAF (explained below) and then divided by the Sessions in a year to give an SC per Session.

This is multiplied by the %'age weighting for all Functional Areas affected and the %'age weighting of all the Functional Units in that Functional Area affected. [there is a potential multiplication effect by adding AWs? ... then multiplying the UWs by this aggregated weighting?]

The DP halves the deduction if the Functional Parts are Unavailable but Used.

The CCAF is used to increase the SC to be the equivalent it would otherwise have been should there have been no Capital Contribution by the Trust to support the construction works. The ITPD assumes that the Trust will contribute £100m to construction.

This deduction, per unavailability event, is compared to the minimum availability deduction (£38.47). This should apply per session / per event, but not per Functional Part. Therefore, a large single point failure will be unlikely to impact on the resultant deduction, however it does increase the typical day-to-day deduction per Functional Unit slightly.

[FA and FU product gives 300% weighting. Gearing increases to 450%. MAD increases this to 458%. CCAF will be finalised – currently assume £100m capital contribution. Original deduction model assumes full UC]

Performance Deductions

Service Performance Failures occurs when there is a failure to provide a service in accordance with the Performance Standards in Schedule 14 (Service Requirements) to the PA. The Trust Representative (or other Trust officer) may give a notice (orally or in writing) to the Helpdesk or Project Co Rep (Trust Service Failure Notice). This Notice will provide detail in relation to the 'Area', the fault, the Rectification Priority Category, the Service, etc. Project Co is also to report such failure should they believe one has occurred.

When notified to the Helpdesk establishes the Logged Failure Time. Within one hour Project Co may dispute or issue the Trust with Notice confirming the cause, the affected Service Requirements and Category, plans to rectify (either temporarily and/or permanently). Should there be a disagreement then the Trust's decision 'shall prevail' subject to Dispute Resolution Procedure.

Service Performance Failure Duration

Where there is no rectification period then the Session in which the Logged Failure occurs is the first session and subsists to and including the Session when the Service Performance Failure ceases to occur.

The Relevant Sessions associated with a Service Performance Failure is calculated in the same way as that outlined for Unavailability.

Similar to Unavailability, should access not have been allowed for 2 hours in any Session, then that Session shall not be taken into account in the Permanent Rectification Period.

Rectification period for Service Performance Failures cross refer to Para 13 of the payment mechanism – reproduced below.

Rectification Priority Category	Description	Make Safe Period	Rectification Temporar y Rectificati on Period	Permanent Rectification Period
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Emergency	A Performance Failure that gives rise to an immediate threat to	30 Minutes	4 hours	4 hours	24 hours where a Temporary Rectification has been carried out
Urgent	A Performance Failure that causes disruption to the Trust, Trust Service Providers or Users but <u>does not render the area</u>	30 Minutes	8 hours	4 hours	48 Hours where a Temporary Rectification has been carried out within 4 hours.
Routine	A Performance Failure that is neither Urgent nor Emergency.	1 hour	48 hours	4 hours	7 Days where a Temporary Rectification has been carried out

Schedule 14 (Service Requirements) identifies in relation to each Performance Standard, whether it is one for which a Rectification Period is allowed.

Calculation of Service Performance Failures

Service Performance Deductions in a month are calculated in accordance with the following formula:

$$SPDn = VPDn + \sum ps (SFD \times (DP))$$

This has two components:

VPDn, which relates to Variation Procedure Deductions; and

$\sum ps (SFD \times (DP))$, which relates to the sum of deductions against each Performance Standard, each calculated by the product of the deduction for the category of failure and the Deduction Period, which is the number of Relevant Session during with the failure subsists.

The table outlines the deductions for the different Service Performance Failure deductions.

Service Priority Category	Service Failure Deduction for Event-Based (E) Performance Standards	Service Failure Deduction per Reporting Cycle for Periodic (P) Performance Standards
Minor	£6.41	£6.41
Medium	£19.24	£19.24
Major	£38.47	£38.47
Super	£64.57	£64.57

Event Based Performance Standards have deductions applied for each failure.

Reporting Cycle Performance Standards have the identified deduction applied for each 'Reporting Cycle' as set out in Schedule 14 (Service Requirements) – effectively the monitoring period. The Service Priority Category of each Service Standard is set out in the Schedule 14 (Service Requirements).

[How does this refer to the formula which multiplies per DP which relates to Sessions? And the definition of duration? Needs to be clarified that Area related performance standards are per session.]

These are indexed annually with RPI, which may suggest a mismatch with the partial indexation of the SC, however we are satisfied that with the FM service charge indexing with RPI, reflecting the indexable element of the SC, and that default and other triggers in the PA relate to point accrual and not deduction levels, that this should not cause any issues on the project in the long term.

There are limitations in relation to Service Failure Deductions, where in certain situations no deductions will be made, which appear to follow reasonably standard lines, just the same as for Unavailability as follows:

- Trust Default;
- Single stage or two stage variation as Schedule 22;
- Qualifying Change in Law;
- Emergency no caused by Project Co;
- Maintenance work as the Schedule of Programmed Maintenance;
- Utilities or statutory undertaker;
- Trust request/instruction;
- Compensation Event;
- Trust step-in; and
- Act, omission or breach of a Trust party.

We also note that there shall be no Rectification Period (where applicable) for a Service Performance Failure which occurs within three (3) Business Days of the Rectification of a Service Performance Failure in respect of the same Performance Standard caused by a re-occurrence of the same failure event.

Variation deductions can be made where Project Co deemed by the Trust that Project Co is in breach of Schedule 22 (Variation Procedure) to the PA. Such break will be treated as a Service Performance Deduction in accordance with the following table.

Failure	Single Stage Variation	Two Stage Variation
Failure to provide a response to a Variation Enquiry	£9.23 (Indexed) for each Business Day over five Business Days	£12.83 (Indexed) for each Business Day over fifteen Business Days
Failure to provide a response of the required standard	£20.76 (Indexed) for each Business Day over five Business Days	£28.86 (Indexed) for each Business Day over fifteen (Business Days
Failure to implement the agreed Variation to the agreed standard	£37.09 (Indexed) for each Business Day following the date established	£51.52 (Indexed) for each Business Day following the date established
Failure to implement the agreed Variation by the agreed date	£37.09 (Indexed) for each Business Day following the date established	£51.52 (Indexed) for each Business Day following the date established

Ratchet

There are three ratchets: one which relates to deductions associated with Unavailability and two to Service Performance Failures. We are satisfied that these have been reasonably considered.

- (1) Unavailability: any Functional Unit that is unavailable for more than 23 sessions in 30 days a ratchet of 1.5 is applied for every 24th and more session of unavailability (or unavailable but use) in that 30 day period.
- (2) Service Performance Failures: dependent on the remedial period, as per the table below, in any 30 day rolling period the number of failures is exceeded (including failure to address, then each subsequent one receives ratchet of 2 in that 30 day period.

Remedial Period	Number of failures* (includes initial failure and failures to address in the remedial period)

5 minutes	24
15 minutes	24
30 minutes	24
1 hour	24
2 hours	12
3 hours	8
4 hours	6
1 day	4
2 days	2
7 days	1
20 days	1

*(includes initial failure and failures to address in the remedial period)

[what does 'and failures to address in the remedial period' mean?]

- (3) Should a Service Performance Failure occur into a second or more Reporting Cycles (as defined in Schedule 14), then the Ratchet of 1.5 will be applied to the second and each subsequent until it is satisfied.

Limitations on Deductions

The payment mechanism carries the standard protection relating to total deductions being capped at the Monthly Service Charge without any carry over to the next month should the cap be exceeded. Similarly, for Elective Services, Service Performance Deductions are capped at the Elective Services Charge for the month.

Other standard limitations are identified:

- Only one failure is calculated for a single event when more than 1 call on the matter has been made to the helpdesk. However, where there are multiple failures during the same session, from different causes, but captured by a single Performance Requirement, then multiple Service Failure Deductions shall be made in that Session.
- Where a failure is such that it can be classified as a failure to meet more than 1 Performance Standard in an Area then the Trust shall only be entitled to make Service Failure Deductions in

respect of one Performance Standard, but choose the one with the greatest Service Failure Deduction.

- No Service Failure Deduction may be made in respect of a Session if an Unavailability Deduction is made by the Trust in respect of that Functional Unit affected by the Service Performance Failure for the same Session – not unavailable but used or temporary accommodation.
- Total Service Failure Deductions in respect of a Functional Unit and a Session shall be capped at the level of Unavailable Deductions for that Session for that Functional Unit.

Reporting Deductions

Should there be an error or omission in a report then deductions may accrue. This is calculated by applying an equivalent to Service Performance Failure for a Periodic Performance Standard.

The first such error or omission within a rolling twelve (12) month period shall attract a deduction equivalent to a Service Performance Failure with a Minor Service Priority Category. The second and third such errors or omissions within a rolling twelve (12) month period shall attract deductions equivalent to Service Performance Failures with a Medium Service Priority Category and Major Service Priority Category respectively. Each subsequent failure within a rolling twelve (12) month period shall attract a deduction equivalent to a Service Performance Failure with a Super Service Priority Category.

8.4. Calibration Introduction

Calibration revolves around the assessment of three elements:

- Deductions associated with Unavailability Event;
- Deductions associated with Service Performance Failures; and
- SFP accrual through Service Performance Failures and Unavailability Events.

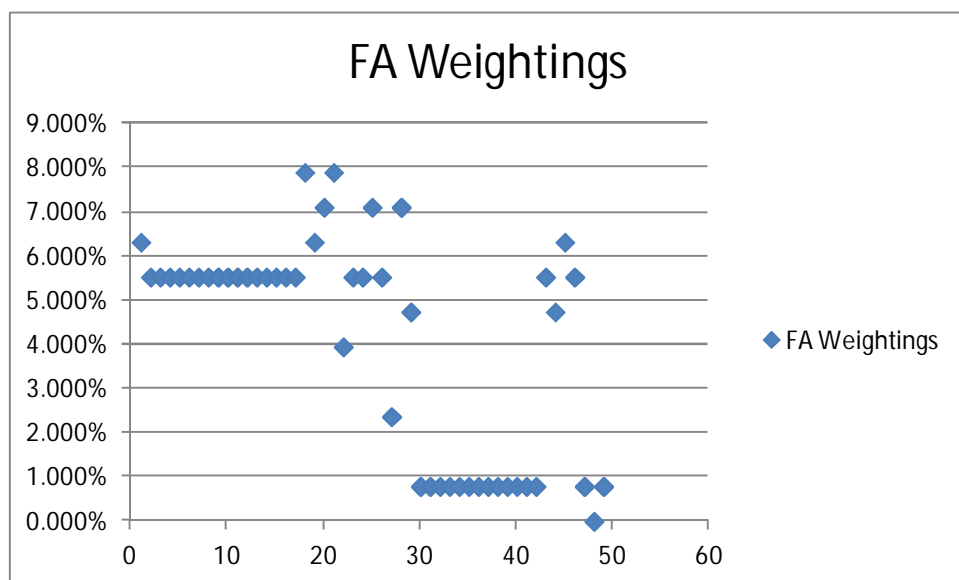
8.5. Unavailability Deductions

Our assessment of how unavailability deductions are constructed at this stage is based on the 'FAFU' table (Functional Area Functional Unit list) provided by the Trust. This provided a full exemplar schedule of accommodation, which establishes the levels of deduction should unavailability occur in any given room, through:

- Weighting of a Functional Area (which broad relates to different departments and areas of clinical or operational function); and
- Weighting of Functional Units within a given Functional Area (which are either single rooms or a group of closely functioning rooms).

These combine weightings for a room, when applied to the Service Charge for a session, then compared to the minimum deduction, provides the deduction anticipated for that space should an unavailability event occur.

There are 49 Functional Areas, with a range of weightings which we illustrate in the following scattergram.



It can be seen that the weightings range between just below 1% up to just below 8%, averaging c. 4%. The total aggregated weighting at FA level is 200%.

Within each FA, FUs are allocated, with weightings. For each FA, the FU weightings add up to 150%. The product of the FA and FU weightings is therefore 300%, i.e. should the whole hospital be unavailable for one session, then 3 times the Service Charge for the session will be deducted.

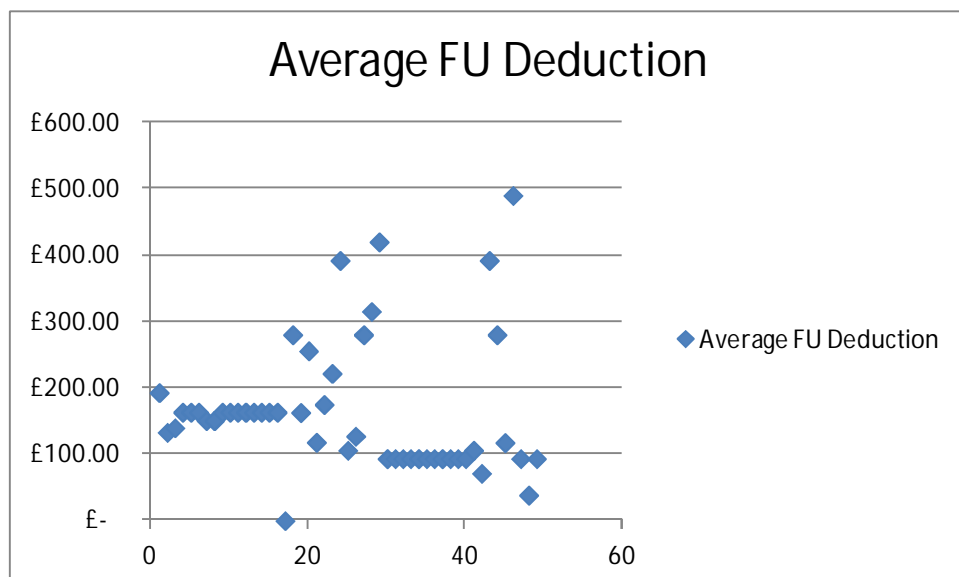
From our analysis of the FAFU table provided by the Trust it indicates that:

- The average number of FUs per FA is c. 9; and

- The average number of rooms per FU is c. 12.

Grouping rooms into a Functional Unit may increase the deduction for an individual unavailability event, however, the normal interpretation is that should more than one unavailability event occur in different rooms in the same Functional Unit in the same session, then it is still a single unavailability as the Functional Unit is considered unavailable as a whole from any occurrence.

From our calculations we illustrate the average deduction for FUs within each of the 49 nr FAs in the scattergram below.



This indicates that deductions may range from just below £100 for a single session (bearing in mind that unavailable but used is the more common event and would be half this amount), with a number of FUs being much higher nearing £500, with an average of c. £160 per session. These high priority spaces relate to clinical functions, such as the following, though a wide range of individual Functional Units throughout the +3,000 rooms may have specifically identified high priority:

- Imaging
- Pharmacy
- Medical engineering
- Mortuary

We are satisfied that this is a workable allocation of rooms to Functional Parts and that, deductions can be appropriately considered by the Facilities Management services provider. Further sensitivity analysis will be undertaken with the resulting actual weighted schedule of accommodation once available.

We note earlier that the minimum availability deduction (£38.47), from our interpretation, does not apply per Functional Part, but per event and session, so wide area unavailability scenarios should not be affected by this multiplier, however small room based day-to-day unavailability events would be affected. Applying the minimum availability deduction increases the effective weighting of the hospital to 450%. We are satisfied that this is a reasonable and market level of effective weighting and that the minimum availability deduction appears to have been appropriately calibrated.

8.6. Performance Deductions

At this stage in reviewing the level of deductions and sensitivities are still being fully developed, however, we have undertaken initial reviews of the performance standards and possible levels of failure. There are 307 areas of performance within the various Performance Standards that may trigger SFP accrual and deductions. We have reviewed each performance standard and we met with Carillion (AMBS) Ltd to review the approach they intend to employ to deliver the various requirements.

Each Performance Standard identifies:

- Performance requirement
- Performance Category (minor, medium or major)
- Periodic (P) or Event (E) based
- Remedial period
- Monitoring frequency and methods
- Definition of failure

Our review indicates that many of the Performance Standards can be delivered through good procedures and management, and relate to good organisation and proficient delivery systems. Some of them are in relation to setting the service delivery requirements at services commencement, so will only be active for a relatively short period of time. These performance standards may still have occasional failure, but likely to be generally negligible. We outline these areas below.

- Prepare interface protocol with Trust

- Soft landings and Post Occupancy Review / Report
- Identify and address construction related snags/defects
- Post occupancy – identify building use patterns, systems delivery, customer satisfaction surveys
- Establish a continuous improvement approach, linked to the Contract Review Date, quarterly reports against Continuous Improvement Indicators
- Appropriate staffing levels as Delivery Plans, including working practices, policies, notification of changes, staff training requirements, uniforms / PPE, induction, behaviour, immunisations and systems relating to illness, etc
- Service Delivery Plans up-dated each year.
- Mobilisation plan updated through construction phase.
- Customer satisfaction plans etc targeting 90%.
- Identify named Authorised Persons, Competent Persons and Suitably Qualified Persons available to respond to issues which require such qualified people, 24 hours a day as required.
- Monthly meetings and reporting requirements, quarterly liaison meetings, annual contract review meetings.
- Service delivery timings and approvals, managing disruption, communications plan, contingency planning, graffiti, safeguards, clock.
- Health & Safety plans and implementation, permits to work, safety advisor involvement, hazard management, safety systems, fire drills Firecode, etc
- Quality management, building user guides, quality management plan, ISO9001, environmental management plan, complaints, first aid.
- Helpdesk delivery, response, trends, deductions, SFP accrual.
- Performance standard monitoring, monthly reporting, annual reporting, information and records, information requests
- Maintenance:
 - Five year maintenance plan
 - Schedule of programmed maintenance (up-date annually)
 - Operational method statements (quarterly review)
 - Monthly programme maintenance report / tasks
 - Complete tasks as Schedule of Programmed Maintenance
 - Management of maintenance tasks
 - Statutory testing
 - Life cycle schedule (up-dated annually), tasks, spend, efficiencies plan
 - Unprogrammed maintenance (refer below)
 - Handback requirements

- Equipment, notification and plant failure, maintain equipment, equipment and waste disposal, commissioning, delivery / storage of equipment / plant / consumables / chemicals.
- Supplies & systems: management and delivery of utilities, water, gas, electricity, oil, building controls, management plans, energy efficiency plan (updated annually), consumption / revenue, energy certificates, licences, contingency plans, Energy and Utility Management Service working group/ forums, reporting, check usage against meters, energy model and baseline management, weather station data.
- Window cleaning, pest control, grounds maintenance.
- Small works and elective services.

There are a range of Performance Standards which are likely to be the focus, month-to-month, for arising performance issues, deductions and SFP accrual. We outlined these in the table below, with a comment against each.

Ref	Description	Comment
104 (PS 17)	Quality Management Services – implement the Quality management Plan in all aspects. Failure per Event. 2 day remedial period	This is per event, therefore it is possible that every even minor non-compliance may be focused on triggering on-going requirements, which, considering the scale of the project, and the detailed requirements (despite a 2 day remedial period) could be an on-going issue.
PS209	Make safe of an Urgent Fault – 30 min remedial period per event. Reassessed every 30 mins.	These are standard responsive requirements, that can occur at any point in time, irrespective of other activities or staffing focus.
PS210	Make safe of an Important Fault – 30 min remedial period per event. Reassessed every 30 mins.	As above
PS211	Make safe of a Routine Fault – 30 min remedial period per event. Reassessed every 30 mins.	As above
PS212	Rectify unprogrammed maintenance – Major category – 4 hour rectification per event.	The rectification of unprogrammed maintenance will be the main focus of the day-to-day services. Similar to make safe, these can occur at any point in time, anywhere in the facility, irrespective of what staff in the facility are addressing at the time.

PS213	Rectify unprogrammed maintenance – Medium category – 8 hour rectification per event.	As above
PS214	Rectify unprogrammed maintenance – Minor category – 48 hour rectification per event.	As above
PS215	Reactive Maintenance relating to availability – Major Category per event. 4 hours remedial period	All occasions of availability will have to be remedied within 4 hours and then deductions will occur for each subsequent 4 hours. This will also apply for unavailability but used.
PS216	Reactive Maintenance relating to availability – Medium Category per event. 4 hours remedial period	As above
PS217	Reactive Maintenance relating to availability – Minor Category per event. 4 hours remedial period	As above
234 (PS19)	Failure to manage and operate building controls and energy management systems effectively. This is per event with a 1 hours remedial period.	This is a large and complex building, fully climate controlled. There are likely to be regular occasions that will require Project Co to address their controls and systems, with only 1 hour to put right.
PS297	Grounds Maintenance – fire escapes marked and clear from obstruction – 30 minute remedial period from event.	There may be some requirements to respond.
PS298	Grounds maintenance - walkways free of obstructions – 30 minute remedial period per event.	As above.
PS299	Grounds maintenance – access areas safe in adverse weather – 15 minute remedial period per event.	As above.

Initial modelling against all the performance standards and in particular the above noted areas of responsive service, indicates that in a typical month £3,000 of deductions may occur. Considering the Annual Service Fee of £2,850,272, equates to 1.5% of the monthly fee, well within the risk margin that the FM provider has identified, which indicates, consider the 10% of total OHP and Risk in the pricing a good margin to support

8.7. Warning Notices and Events of Default

Appendix D of Schedule 18, Payment Mechanism, of the PA, sets out the thresholds proposed by the Trust for a number of 'sanctions', as below.

PA	Sanction	Period	General	Estates	G&G	Pest Control	Helpdesk	Total
Clause		Months	SFPs	SFPs	SFPs	SFPs	SFPs	
29.4.2	Warning Notice	1	104	938	88	63	63	1,256
29.5	Increased Monitoring	3	3 warning notices in 6 months					
29.6 (b)	Trust Step-in	1	259	2,344	219	156	156	
44.7	Service Provider Replacement	6	N/A	N/A	525	375	N/A	
44.1.9 (a)	Event of Default:	6	0	0	0	0	0	7,899
44.19 (b)		12	0	0	0	0	0	11,848

There are two Project Co Events of Default relating to the accrual of Service Failure Points in Clause 44.1.9:

- 7,899 or more Service Failure Points in any six (6) month rolling period; or
- 11,848 or more Service Failure Points in any twelve (12) month rolling period.

CI 8A.1 of the Payment Mechanism states that "Service Failure Points shall be awarded for every Performance Failure and every Unavailability Event deemed or actual which occur during the Project Term unless such matters are disregarded pursuant to paragraph 5.7 (Limitation on Service Performance Deductions) and further disregarding any Performance Failure or Unavailability Event which is attributable to the occurrence of a Relief Event or an event of Force Majeure"

It is important to note that "If the same Unavailability Event or Performance Failure affects more than one (1) Functional Unit, the number of Service Failure Points to be awarded in respect of that Unavailability Event or Performance Failure shall be the same as if only one Functional Unit had been affected." This limits the impact of SFP accrual during single point wide spread failures.

SFPs accrue in accordance with Appendix C of Schedule 18 – Payment Mechanism:

Category	Service Failure Points
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Minor Performance Failure	2
Medium Performance Failure	6
Major Performance Failure	20
Unavailability Event (whether or not the Trust chooses to use the Functional Unit)	20

We have compared the levels proposed to two other recently signed similar projects, to understand 'market'.

Cl. 44.1.9	Midland Metropolitan (82,257 m2)	[PFI Hospital in construction] (52,143 m2)	[PFI Hospital in construction] (93,700 m2)
First limb	7,899 SFPs in 6 months	6,100 SFPs in 6 months	7,845 SFP 6 months
Second limb	11,848 SFPs in 6 months	8,250 SFPs in 12 months	11,483 SFP 12 months

It can be seen that the levels proposed for the Midland Metropolitan Hospital, compared to two recently signed major hospital PFIs (considering adjustments for floor area), indicates similar levels, [but these projects had the additional Cl 44.3(c) mechanism, which is excluded on this project.]

We note that the default levels compare appropriately with the aggregate of the individual warning notice levels. The 6 month threshold equates to c. 1 warning notice for each area of service each month. The 12 month threshold equates to c. 1 warning notice for 9 of the 12 months of the year for each area of service.

8.8. Default / Termination and FM Sub-contract Pass Down

The new PF2 construction of SFP related default appears to have removed a previous Clause 44.3(c) from the standard form, which gave an SFP threshold that allowed a further period of SFP accrual after triggering default, that if breached would then trigger the right to terminate. The right to terminate is now immediate upon default. The previous Clause 44.3(c) was constructed as follows.

"in the case of any Project Co Event of Default referred to in Clause 0 (Service Failure Points), if Project Co is awarded [] or more further (Service Failure Points) (Warning Notices) in the following [] month period, terminate this Agreement in its entirety by notice in writing having immediate effect."

[At this stage, we are unsure as to how adequate windows to the FM sub-contract have been constructed, and then in relation to any thresholds in the debt facility agreement, in relation to the time period of point accrual and the threshold of the SFP accrual compared to the PA]

There is a bedding in period for a new services provider (who has been replaced at sub-contract level), whereby during the bedding in period (6 months), whereby no SFPs accrue for 6 month, then 25% in month 7, 50% in month 8 and 75% in month 9. We consider this to be typical approach.

[Aside from the how the windows to the FM sub-contract are to be constructed, an initial discussion of levels of deduction with Carillion (AMBS) Ltd indicates that they are satisfied that this represents levels of default, however discussion on the interpretation and delivery of performance standards are on-going.]

8.9. Energy

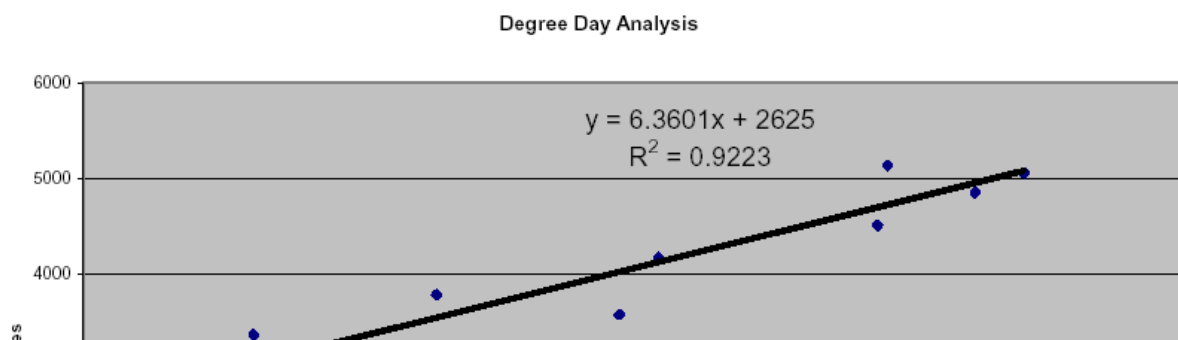
Energy is generally following a standard approach used on English major healthcare PFI projects. We outline the approach, in summary, below.

The Trust shall from time to time as required enter into contracts with Energy suppliers for the supply of Energy to the Facilities and shall be responsible for all payments due pursuant to such supply contracts.

Annual Energy Target

After the Initial Period (first two years following Services Commencement), Project confirms to the Trust the monthly Energy Consumption [Gigajoules] during the Initial Period and the number of Heating Degree Days (the average outdoor temperature at Birmingham Airport was less than a mean temperature of +18.5°C) for each of those months.

From this data a graph is plotted. On the vertical ('y') axis is the energy consumption during the relevant month and the horizontal ('x') axis shall show the number of Heating Degree Days in that month. From this scatter diagram a best fit line is drawn using regression analysis.



This is the example taken from the Department of Health's guidance document when this approach was adopted by PFI contracts.

Where the graph hits the y axis will be deemed the 'baseload', i.e. the energy used by the facility without the impact of heating energy for an average month.

The slope of graph can be represented as a formula. This then allows the energy target to be adjusted each year to the number of heating degree days based on the following formula:

$$Y = MX + C$$

Y is the energy target

M is the slope gradient

X is the heating degree days per annum based on the 20 year average to that point

C is the baseload x 12.

Annual Target Adjustment

Each year the established target formula is used to reset the target based on using, for the purposes of X, the most recently published 20 Year Average as at the Annual Review Date. The Annual Energy Target shall also be adjusted, if appropriate, as a result of a Qualifying Variation.

Every five years this slope is re-based/re-set using the recorded energy consumption data and Heating Degree for each of the 60 months of that period.

Painshare/ Gainshare

The painshare / gainshare mechanism itself is applied every 12 months. At the end of each year the actual energy consumption and the estimated (adjusted for the actual Heating Degree Days experienced) is compared. Should the energy have varied from the established target by + or – 3% then there is no painshare or gainshare. Trust and Project Co share 50:50 either excess bill over 3% volume (added as gainshare to the Services Payment or over 3% under deducted from the Service Payment).

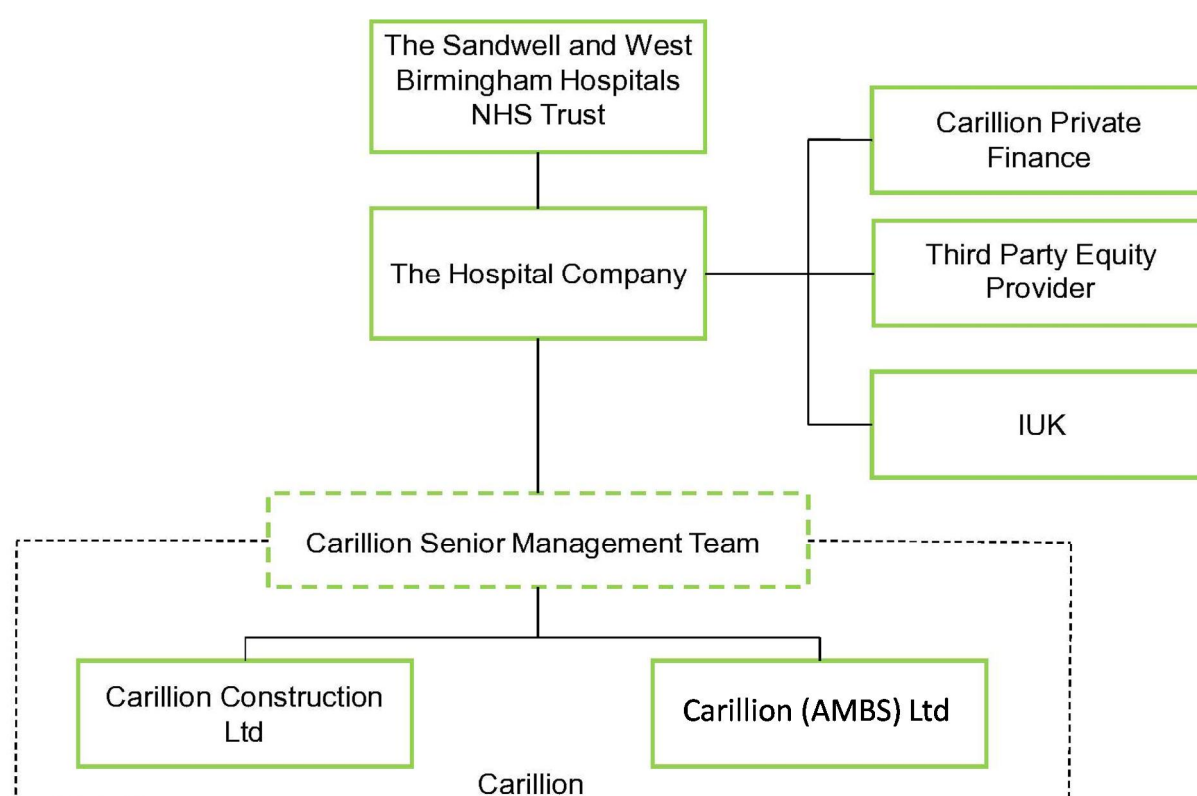
The payment is based on the proportion of usage to be paid multiplied by the AUC (Average Unit Cost). The AUC is calculated by dividing by total usage, the sum of all 'standing charges and similar non-usage charges plus the actually volume related payments for each form of energy.

Should the actual consumption vary by more than 13% then an independent expert shall be commissioned at joint cost of the Trust and Project to assess and reporting on the cause of the variance and assess the responsibility of Project Co and the Trust.

9. CONTRACT REVIEW – PROJECT AGREEMENT

9.1. Introduction

The proposed contractual arrangements with between the Trust (The Sandwell and West Birmingham Hospitals NHS Trust), Project Co (The Hospital Company (MMH) Ltd) and the sub-contracts are outlined below.



The Agreement is split into the following parts:

- Part A - Preliminary;
- Part B – General Provisions;
- Part C – Land Issues;
- Part D – Design and Construction;
- Part E - Quality Assurance;
- Part F – Information Technology;
- Part G – Services;

- Part H – Payment and Financial Matters
- Part I – Changes in Law and Changes;
- Part J - Delay Events, Relief Events and Force Majeure;
- Part K – Termination; and
- Part L – Miscellaneous.

There are also a number of Schedules to the Agreement, as follows:

- Schedule 1 – Definitions and Interpretation;
- Schedule 2 – Completion Documents;
- Schedule 3 – Custody Agreement;
- Schedule 4 – Key Works Personnel;
- Schedule 5 – Disaster Plan;
- Schedule 6 – Funders' Direct Agreement;
- Schedule 7 – Land Matters;
- Schedule 8 – Construction Matters;
- Schedule 9 – The Programme;
- Schedule 10 – Review Procedure;
- Schedule 11 – Collateral Agreements;
- Schedule 12 – Outline Commissioning Programme;
- Schedule 13 – Equipment;
- Schedule 14 – Service Requirements;
- Schedule 15 – Independent Tester Contract;
- Schedule 18 – Payment Mechanism;
- Schedule 19 – Financial Model;
- Schedule 20 – Deed of Safeguard;
- Schedule 21 – Insurance Requirements;
- Schedule 22 – Change Protocol;
- Schedule 23 – Compensation on Termination;
- Schedule 24 – Handback Procedure;
- Schedule 25 – Record Provisions;
- Schedule 26 – Dispute Resolution Procedure;
- Schedule 27 – Project Co Information;
- Schedule 28 – Certificates;

- Schedule 29 – Refinancing;
- Schedule 30 – Employee Information;
- Schedule 31 – Proposed Workforce Information;
- Schedule 32 – [Pensions]
- Schedule 34 – Insurance Proceeds Account Agreement;
- Schedule 35 – Commercially Sensitive Information;
- Schedule 36 – Independent Tester Certificate.

9.2. Review of Project Agreement

9.2.1. Part A: Preliminary

Project Co is to perform their obligations associated with the Project Documents (which consist of the Construction Contract, Services Contract, Performance Guarantees and the Funding Agreements). Any material changes to these documents will require the consent of the Trust.

We note that the drafting of clause 4.2 requiring the prior written consent of the Trust to enter into new Funding Agreements (or termination, amendment or waiving of rights on the Funding Agreements).

The Trust is to not wilfully impede Project Co in the performance of their obligations under the Project Agreement.

9.2.2. Part B: General Provisions

We note that Project Co will be required to gather all information on the nature, location and condition of the land (including hydrological, geological, geo-technical and sub-surface conditions).

We also note that Project Co will be required to gather all information on the archaeological interest of the site.

We note the inclusion of the Excusing Cause relating to the rectification of Snagging Matters (clause 8.7.6). Although this is not standard form, we consider this a reasonable inclusion.

In accordance with clause 11.1 and 11.7, the Trust and Project Co have to name their Representative who will be entitled to exercise the functions and powers of the Trust and Project Co. The Representative from Project Co is to be involved all through the Works (design and construction phase) and not to be involved in any other project on behalf of Project Co if the Trust reasonably consider that this would adversely affect the Project. This is in line with standard form drafting provisions.

The Trust and Project Co are to form a Joint Liaison Committee consisting of 3 representatives each from the Trust and Project Co.

9.2.3. Part C: Land Issues

Project Co will be granted a lease to exercise the Ancillary Rights to implement the Works. This is from the issue of the Certificate of Commencement Date until the Actual Completion Date (or Termination Date if earlier). Following completion, Project Co will be granted access to the Facilities for the purposes of carrying out the delivery of the required services, remedy defects and complete snagging works. This is in line with standard form drafting provisions.

Project Co accepts the risk associated with the condition of the Site. This risk is passed down to the Construction Contractor in the Construction Contract.

Through clause 16, Project Co will be responsible for obtaining all Consents required to deliver the Works, with some obligations placed on the Trust (detailed within Schedule []).

9.2.4. Part D: Design and Construction

We note the inclusion of project specific drafting relating to the Advance Works. We consider it appropriate to have this inclusion.

Project Co are to warrant that they have used, and will continue to use, the degree of skill and care in the design of the Facilities that would reasonably be expected of a competent professional designer experienced in carrying out design activities of a similar nature, scope and complexity to this scheme.

We note the inclusion of project specific drafting within clause 17.3 relating to the data which is to be published by an “industry recognised source” to be agreed with the Trust (acting reasonably). We consider it appropriate to have the amended drafting. It may be better to agree the source prior to Financial Close, so there is no disagreement in future.

We note the inclusion of the requirement for Project Co to assist and support the Trust to meet their obligations under the CRC scheme and also to achieve a BREEAM Healthcare “Excellent” score under ENE01. We have provided comment on the BREEAM Pre-Assessment earlier in this report.

At the date of Financial Close, the Trust will confirm they have reviewed Project Co’s Proposals (and subject to any qualifications/comments made), the proposals meet the Trust’s requirements in terms of Operational Functionality. Throughout the construction period, the Trust will be required to review Reviewable Design Data (RDD) submitted by Project Co, who will not be entitled to permit the construction of any part of the works which haven’t been signed off by the Trust through the RDD process. This is in line with standard form drafting.

Project Co is to procure that the Contractor establishes and maintains a computerised design database associated with the Reviewable Design Data.

We note the inclusion of the project specific amendment permitting the Trust to inspect the operation and maintenance of the Project and to monitor compliance by Project Co with its obligations under this Agreement (clause 18.1.1(b)). We would note that this addition appears to be associated with the “operation and maintenance”. We would consider this drafting would be better placed within Part G of the Project Agreement.

We note that Clause 18.3A is still under discussion between the Trust and Project Co. This relates to the Trust being entitled to exercise its rights of access and remedy a breach under clause 28 of the Project Agreement.

We note the inclusion of the project specific drafting relating to the Trust being liable for reasonable costs associated with any damage (as a result of the Trust exercising their right under clause 18) being claimed through a Compensation Event. We consider it appropriate to have this inclusion.

We note the inclusion of the project specific drafting relating to the Trust having to comply with all relevant health and safety procedures. We consider it appropriate to have this inclusion.

Through clause 19, this confirms that the Trust will not be entitled to claim for liquidated damages in respect of any delay to the works.

The Trust and Project Co have to appoint a suitably qualified and experienced Independent Tester who will be responsible for issuing the various certificates confirming completion of each phase has occurred. These certificates include:

- Certificate of Practical Completion in respect of the Facilities (clause 22.12); and
- Commissioning Completion Certificate (clause 23.4).

The Trust is to provide Project Co with a draft Final Commissioning Programme, no later than 12 months prior to the Completion Date. Project Co then has 15 Business Days to return their comments on this programme. The Final Commissioning Programme is then to be agreed within 10 Business Days of receipt of Project Co's comments. If the parties are unable to agree within 2 months, this shall be referred to the Dispute Resolution Procedure.

The Independent Tester is to issue the Snagging Notice within 5 Business Days of the date of issue of the Certificate of Practical Completion.

We note the project specific drafting associated with the categorisation of Snagging Matters and the allowance of the Trust to issue a supplement to the Snagging Notice. Should a timescale be incorporated for the Trust to issue the supplement to the Snagging Notice?

We consider that clause 22.15 is not in line with market practice – this would lead to deductions and SFPs being applied against any Snagging Matter not rectified within the appropriate timescale. Normally, the Trust are entitled to rectify outstanding Snagging Matters (at the expense of Project Co) as is set out within clause 22.16 of the Project Agreement.

We note the project specific drafting included associated with the WiFi Completion.

Project Co is to permit the Trust access to undertake the Trust's commissioning activities. This is in line with standard form drafting.

Project Co and the Trust have to complete their respective Post-Completion Commissioning activities in line with the Final Commissioning Programme.

9.2.5. Part E: Quality Assurance

Project Co is required to procure that all aspects of the service delivery are consistent with BS EN ISO 9001/9002.

Project Co is required to prepare the following Quality Plans:

- Design Quality Plan;
- Construction Quality Plan; and
- Services Quality Plan for each Service.

9.2.6. Part F: Information Technology

Not Used.

9.2.7. Part G: Services

Project Co is to commence the delivery of services from the Actual Completion Date.

Project Co is to provide the Schedule of Programmed Maintenance 3 months prior to the Completion Date and then each year, provide the schedule for the succeeding year 3 months prior to the anniversary of the Completion Date.

Project Co is to also provide the 5 Year Maintenance Plan no later than 30 Business Days prior to the Completion Date (and on each subsequent anniversary).

We note the inclusion of the drafting relating to lifecycle profile and spend and the sharing of surpluses (clause 28.15 through to 28.20). This is in line with PF2 guidance documentation with 50% of the surpluses being shared between the Trust and Project Co.

The instances where the Health Board can issue a Warning Notice are specified within clause 29.4. These are:

- Where Project Co has committed a material breach of its obligations;
- Where Project Co has accrued a level of SFPs in a one month rolling period (as set out within the Payment Mechanism). We comment further on these levels earlier in this report.

The Trust will be permitted to increase its monitoring of Project Co in the event of 3 or more Warning Notices being received in a 6 month period.

Project Co is to consult with the Trust relating to the selection process for Project Co's Hospital Manager. This manager is not to be appointed without the prior written consent of the Trust.

9.2.8. Part H: Payment and Financial Matters

This section provides the detail behind the invoices to be submitted by Project Co along with the associated timescales. This is in line with standard form drafting (with project specific timescales).

The Trust will be permitted to make Capital Payments on the scheme.

We would suggest the insurance adviser review the insurance clauses. We will provide responses to technical queries raised by the insurance adviser.

9.2.9. Part I: Changes in Law and Variations

We note the project specific amendment of Project Co taking the cost of the first £1,400 associated with Change in law. Standard Form documentation is based upon £1,000.

There shall be an amendment to the Annual Service Payment in the occurrence of a Relevant Change in Law (Discriminatory Change in Law or Specific Change in Law).

9.2.10. Part J: Delay Events, Relief Events and Force Majeure

We note the following are specified as Delay Events:

- The occurrence of a Trust Works Variation that would delay the completion;

- Any breach by the Trust of any of their express obligations in the Agreement;
- The execution of works on the Site not forming part of the Agreement by the Trust or any Contractors employed by the Trust;
- Opening up of the works which are found to not be defective;
- Force Majeure (war, civil war, armed conflict or terrorism; nuclear contamination; chemical or biological contamination; pressure waves caused by devices travelling at supersonic speeds);
- A Relief Event; and
- A Relevant Change in Law.

These are in line with standard form drafting.

The occurrence of a Delay Event would provide Project Co with time compensation only (an extension to the planned completion dates).

There are three Delay Events that can give rise to a Compensation Event:

- Any breach by the Trust of any of their express obligations in the Agreement;
- The execution of works on the Site not forming part of the Agreement by the Trust or any Contractors employed by the Trust; and
- Opening up of the works which are found to not be defective.

This would result in Project Co being compensated for any additional costs incurred as well as for any time delay.

The following are classed as Relief Events:

- Fire, explosion, lightning, storm, tempest, flood, bursting or overflowing of tanks, apparatus or pipes, ionising radiation, earthquake, riot or civil commotion;
- Failure by a statutory undertaker, utility company, local authority or other party to carry out works or provide services;
- Accidental loss or damage to the Works and/or Facilities or any roads servicing them;
- Failure or shortage of power, fuel or transport;
- Blockage or embargo falling short of Force Majeure;
- Discovery of fossils, antiquities and human remains;

- Official or unofficial strike, lockout, go slow or other dispute affecting the construction, building maintenance or facilities management industry.

These Relief Events are in line with standard form drafting.

The occurrence of a Relief Event does not entitle Project Co to compensation. This only means that Project Co cannot be terminated due to the occurrence of a Relief Event.

9.2.11. Part K: Termination

There are a series of Trust Events of Default which can lead to termination of the Agreement by Project Co. These include:

- The Trust being in material breach of its obligations;
- The Trust failing to pay sums to Project Co which is:
 - A Capital Payment;
 - which exceeds the Monthly Service Payment;
- Breach of clause 50; and
- An Adverse Law or Proposal from an Adverse Law being made.

The following are Project Co Events of Default:

- Insolvency;
- Project Co failing to achieve the Actual Completion Date 18 months after the Completion Date (longstop date);
- Project Co committing a material breach of its obligations;
- Project Co abandoning the Works;
- Project Co committing a material breach which results in a health and safety conviction;
- Project Co being awarded 7,899 or more SFPs in any 6 month rolling period or 11,848 SFPs in a 12 month rolling period – refer to Section [] of this report for further comment;
- Project Co failing to pay sums due to the Trust in excess of £500,000;
- A breach by Project Co to maintain the required insurances.

The Trust shall be entitled to terminate the Agreement voluntarily by giving 12 months written notice.

9.2.12. Part L: Assignment, Sub-Contracting and Changes in Control

We have no technical comments to make.

9.3. Review of Schedules to the Project Agreement

9.3.1. Schedule Part 1 – Definitions and Interpretation

We note the following project specific inclusions within this Schedule:

- Active Hardware;
- Active Hardware Replacement Programme;
- Advance Works;
- Advance Works Agreement;
- Advance Works Contractor;
- Available Equipment List;
- Beneficial Access;
- Beneficial Access Date;
- Capital Payment;
- Capital Payment Limit;
- Certificate of WiFi Post Completion;
- Commissioning Damage;
- Commissioning Damage Notice;
- Commissioning Steering Group;
- Construction Costs;
- Contractors Window;
- CRC Scheme;
- Demarcation Points;
- Existing Stock;
- MAC;
- NCC;
- Network Active Infrastructure Area;
- Network Infrastructure;
- Network Infrastructure Requirements;

- Network Infrastructure Service;
- New Purchase Value;
- Notification Date;
- Notification Date Reminder;
- Outstanding Trust's Commissioning;
- Passive Components;
- Passive Component Replacement Programme;
- Pre-Completion Trust Access Equipment;
- Proposed Access Dates;
- Selection Programme;
- VLAN;
- WiFi;
- WiFi Actual Completion Date;
- WiFi Amount;
- WiFi Post-Completion Tests;
- WiFi Post-Completion Tests Completion Date;
- WiFi Post-Completion Completion Criteria;
- Wireless Access Point;
- Wireless Coverage Area;
- Wireless Network; and
- Wireless Network Infrastructure.

9.3.2. Schedule 2 – Completion Documents

We have no technical comment to make on this Schedule.

9.3.3. Schedule 3 – Custody Agreement

We have no technical comment to make on this Schedule.

9.3.4. Schedule 4 – Key Works Personnel

We have no technical comment to make on this Schedule.

9.3.5. Schedule 5 – Disaster Plan

We note the following obligations on Project Co:

- Support and input into the production of the Major Incident Plan and Business Continuity Plan;
- Input to the Business Continuity Plan to support ongoing services and recovery of the Trust;
- Develop a Disaster Plan (the Project Co Estates Services Disaster Plan);
- Supply a copy of the Contractor's Fire and Emergency Plan;
- Input into programmed exercises testing response to a range of incidents and challenges;
- Participation in monthly communication tests;
- Identify an Emergency Planning Liaison Officer (EPLO) to work with the Trust (this EPLO will act as a member of the Trust's Emergency Planning Team);
- Input into the annual update of the Major Incident Plan and Business Continuity Plan;
- Become a member of the Trust Major Incident Team;
- Update the Project Co Estates Services Disaster Plan on an annual basis;
- All Project Co Parties to be trained in responses to and participation in Major Incident Plan.

9.3.6. Schedule 6 – Funders' Direct Agreement

We have no technical comment to make on this Schedule.

9.3.7. Schedule 7 – Land Matters

Project specific information awaited.

9.3.8. Schedule 8 – Construction Matters

This schedule is split in line with Standard Form documentation into the following Parts:

- Part 1 – Planning Consents;
- Part 2 – Safety During Construction;
- Part 3 – Trust's Construction Requirements;
- Part 4 – Project Co Proposals;
- Part 5 – Reviewable Design Data;
- Part 6 – Room Data Sheets;
- Part 7 – Thermal and Energy Efficiency Testing Procedure; and
- Part 8 – Quality Plans (Design and Construction).

Section 1 – Planning/Consents

- We understand this will list the planning consent(s) achieved for the scheme.

Section 2 – Safety During Construction

We have no technical comment to make on this section of Schedule 6.

Section 3 – Trust's Construction Requirements

We have provided comment on the Trust's Construction Requirements (TCRs) within section 3 of this report.

Section 4 – Project Co's Proposals

We comment on Project Co's Proposals throughout this report.

Section 5 – Reviewable Design Data

A project specific list of Reviewable Design Data will be incorporated into this section.

Section 6 – Room Data Sheets

[]

Section 7 – Thermal and Energy Efficiency Testing Procedure

We provide comment earlier in this report.

Section 8 – Quality Plans (Design and Construction)

We have no technical comment to make on this section of Schedule 6.

9.3.9. Schedule 9 – The Programme

We provide comment earlier in this report.

9.3.10. Schedule 10 – Review Procedure

We note the Trust has indicated the list of RDD elements within Table A of this Schedule, and has also indicated the times where Project Co will be permitted to carry out Programmed Maintenance.

We note some departments have been listed as “As per departmental operational hours”. Ideally, we would prefer to see specific times incorporated into the Schedule.

9.3.11. Schedule 11 – Collateral Agreements

We have no technical comment to make on this Schedule.

9.3.12. Schedule 12 – Outline Commissioning Programme

This is a project specific schedule. We have noted below a number of comments/queries on this schedule:

- We consider clause 3.3 penalises Project Co for providing Beneficial Access to the Trust within the agreed timescale, but then the Certificate of Practical Completion will not be issued until the Outstanding Trust’s Commissioning has been completed;

- Will the Access Area be cleaned by Project Co or the Trust?;
- Reference to Planning Supervisor should be amended to Principal Designer;
- What is the Contractor's Certificate of Compliance?;
- Within Table A, the dates to be checked for consistency, e.g. Item 4 should be linked to Item 3 rather than 2; Item 5 should be linked to Item 4 rather than 3;
- Project Co to be responsible for obtaining late trading licence for the restaurant – would consider this should be progressed by the operator of the restaurant; and
- Reference to deep clean should be amended to builders clean within Appendix 5, clause 1.

1.1.2. Schedule 13 – Equipment

We have noted below a number of comments/queries on this schedule:

- Will need clarity on how the installation of C1, D1, E1, F1, L1 Equipment will be progressed – currently listed as Project Co/Trust Install.
- P1 – will the MES Provider be a Trust Party?
- L2 Equipment is listed as Group 3 yet Project Co Installation. Is this correct?

1.1.3. Schedule 14 – Service Requirements

There are 3 definitions within Schedule 14 that are defined differently in Schedule 1. These are:

- Customer Satisfaction Survey;
- Five Year Maintenance Plan; and
- Helpdesk.

We would suggest the definition in Schedule 14 be removed.

1.1.4. Schedule 15 – Independent Tester Agreement

We note the inclusion of the project specific WiFi Post-Completion requirements within the scope of service to the Agreement.

Reference will require to be made to certification of Trust Capital Payments within the Agreement.

The following parties will enter into the IT Contract:

- Trust;
- Project Co;
- Independent Tester;
- Funder; and
- Contractor.

We note that all fees are to be paid on a shared basis by Project Co and the Trust.

The Professional Indemnity Insurance is to be at a level of £10m with a liability cap of £10m.

1.1.5. Schedule 18 – Payment Mechanism

Please refer to our comment in section [] of this report.

1.1.6. Schedule 19 – Financial Model

We have no technical comment to make on this Schedule.

1.1.7. Schedule 20 – Deed of Safeguard

We have no technical comment to make on this Schedule.

1.1.8. Schedule 21 – Insurance Requirements

The following insurances are required to be procured and maintained during the construction phase:

- Contractor's "All Risks" Insurance;
- Third Party Public and Products Liability Insurance;

- Delay in Start Up Insurance.

Contractor's All Risks

The Sum Insured is to be the full reinstatement/replacement value plus provision to incorporate Cover Features and Extensions.

Third Party Public and Products Liability Insurance

This is to be procured at a minimum indemnity level of £75m.

Delay In Start Up Insurance

We note the Minimum Indemnity Period has been included as 33 months, which we consider to be a suitable level.

During the operational phase, the following insurances have to be maintained:

- Property Damage Insurance;
- Third Party Public and Products Liability Insurance;
- Business Interruption Insurance.

For the Business Interruption Insurance, we note the Minimum Indemnity Period has been included as 33 months, which we consider to be a suitable level.

1.1.9. Schedule 22 – Variation Procedure

The Variation Procedure schedule has been substantially re-drafted from the latest Standard Form documentation. This now allows the Variations to be split into a Single Stage or Two Stage Variation process.

1.1.10. Schedule 23 – Compensation on Termination

We have no technical comment to make on this Schedule.

1.1.11. Schedule 24 – Handback

We note the Trust will be entitled to recover the cost of the survey from Project Co (in the event of any aspect of the Facility not being in compliance with the Handback Requirements), either via a withdrawal from the Retention Fund Account, a deduction from the next Service Payment or by other means of disbursement. We are unsure how the Retention Fund Account works from review of this Schedule.

Project Co is required to maintain the Facilities so that they comply with the Service Level Specifications and be consistent with the design life requirements set out within the TCRs.

18 months prior to the Expiry Date, the Trust is to undertake an inspection of the Facilities. If any elements of the Facilities are not in accordance with the Handback Requirements, then Project Co have to provide a proposal on what works are required, when these will be undertaken and the associated cost of completing the works.

Project Co is to procure a Handback Bond to the value of remedial works required to bring the Facility up to the required condition.

30 Business Days prior to the Expiry Date, a joint inspection will be undertaken by the Trust and Project Co. Within 60 Business Days of the Expiry Date, the Trust Representative is to either issue a Handback Certificate (and return the Handback Bond to release the balance of funds within the Retention Fund account) or notify Project Co why it is unable to issue the Handback Certificate. If the required works are not complete, Project Co will pay the Trust the cost of completing the outstanding works. Once the payment is received, the Trust will issue the Handback Certificate.

1.1.12. Schedule 25 – Record Provisions

We have no technical comment to make on this Schedule.

1.1.13. Schedule 26 – Dispute Resolution Procedure

We have no technical comment to make on this Schedule.

1.1.14. Schedule 27 – Project Co Information

We have no technical comment to make on this Schedule.

1.1.15. Schedule 28 – Certificates

We have no technical comment to make on this Schedule.

1.1.16. Schedule 29 – Refinancing

We have no technical comment to make on this Schedule.

1.1.17. Schedule 30 – Employee Information

We have no technical comment to make on this Schedule.

1.1.18. Schedule 31 – Proposed Workforce Information

We have no technical comment to make on this Schedule.

1.1.19. Schedule 32 – [Pensions]

We have no technical comment to make on this Schedule.

1.1.20. Schedule 34 – Insurance Proceeds Account Agreement

We have no technical comment to make on this Schedule.

1.1.21. Schedule 35 – Commercially Sensitive Information

We have no technical comment to make on this Schedule.

1.1.22. Schedule 36 – Independent Tester Certificate

The Independent Tester is to issue a certificate relating to Capital Payments. We have no technical comment to make on the Certificate.

The following schedules have not been used:

- Schedule 16;
- Schedule 17;
- Schedule 33.

10. CONTRACT REVIEW – CONSTRUCTION CONTRACT

10.1. Introduction

We are in receipt of the draft Construction Contract between Project Co and Carillion Construction Limited (the “Contractor”). The intention is that the obligations of Project Co from the Project Agreement will be passed down to Carillion through the Construction Contract (on a back to back basis).

We note the following key terms:

- The Contractor will accept the risks on site conditions including ground conditions, environmental conditions, climatic conditions and the state of existing works on the site. There will be no increase to the Contract Sum as a result of any unforeseen ground conditions.
- The Contractor will be responsible for obtaining all necessary consents, licences and permissions (except where these are expressly stated to be procured by Project Co).
- The construction cost is to be a fixed lump sum which will only be varied through circumstances to be set out in the Design and Building Agreement. We will cover changes, breaches by Project Co or any Compensation Events.
- Payment is to be made on a monthly basis. The payment will not exceed the cashflow profile contained within the financial model. Retention at a level of 3% is to be applied to all payments, which will be released at 45% upon completion of the building with 5% on the Actual Completion Date – the balance will then be paid upon the anniversary of the relevant Actual Completion Date.
- A mechanism is to be included to allow the Funders’ TA to forecast whether the works will be completed by the planned completion date (if not likely to complete, the Contractor is to prepare an Initial Recovery Plan), within 6 months of the planned completion date (Updated Recovery Plan to be prepared) and by the Long Stop Date (a Contractor event of default).
- Liquidated damages will be applied against the Building Contractor in the event of late completion. These damages will reflect debt service payments and reasonable Project Co costs and revenue.

- The Contractor will be required to provide a security package which will consist of a parent company guarantee and a construction letter of credit (to the value of 3% of the Contract Sum).
- The Building Contractor will be required to take out and maintain professional indemnity insurance and employer's liability.
- [A number of Termination Events are listed, which we consider to be in line with market practice. We would normally expect to see a breach of health and safety included within the Termination Events.]
- We note the Long Stop Date has been inserted as 12 months after the Actual Completion Date, which gives an acceptable window of 6 months with the 18 month long stop date at PA level.
- The liability of the Contractor will expire 12 years after the date the certificate of practical completion was issued. There will be a 12 month defects liability period from completion of the works. [We would normally expect to see the liability period relating to the later of the completion date or date of termination.]
- The Contractor is to reimburse Project Co for Availability Deductions/Service Failure Deductions caused by any defects up to 3% of the Contract Sum.
- There will be a Liquidated Sum Cap, which will be 10% of the Contract Sum (based upon the Long Stop date set at Project Agreement level by the daily LAD level).
- The liability of the Building Contractor will be capped at 50% of the Contract Sum (100% for Contractors abandonment for wilful default), which we consider to be acceptable.

10.2. Part A: Preliminary

Within [40] Business Days of Financial Close, the Contractor is to provide the Design Collateral Warranty (from Key Design Subcontractors) and also the Construction Collateral Warranty (from Key Specialist Subcontractors). If these parties are not appointed by Financial Close, then the warranty is to be provided within [40] Business Days of appointment.

The Contractor is to be provided with copies of the Project Documents (Project Agreement, the Service Contracts, the Key Subcontracts, Contractors Collateral Agreement and Performance Guarantees and also the Funding Documents). The Contractor is to have full knowledge of these documents (to the

extent that they are relevant to the Works) and will perform its obligations so that it will not cause a breach of any of these documents. Any breach by the Contractor may result in Project Co incurring additional costs/liabilities which will be passed to the Contractor.

The Works are to be performed:

- In accordance with Good Industry Practice;
- In a manner consistent with the Design and Construction Quality Plans;
- In compliance with all Law and Consents;
- In a manner that is not injurious to health or will cause damage to property;
- In compliance with all applicable NHS Requirements (subject to agreed derogations).

10.3. Part B: General Provisions

The requirement for the Contractor to provide a Surety Bond is currently in square brackets. The Funder may require this to be procured.

A Letter of Credit at a level of [3%] of the Contract Sum is to be procured.

The Contractors liability to pay liquidated damages will be capped at [10%] of the Contract Sum. This will be sized by reference to the Project Agreement longstop date. This level may be increased in agreement between Project Co and the Contractor. We consider this level to be acceptable.

The Liability Cap for the Contractor is to be 50% of the Contract Sum, except where Abandonment and/or Wilful Default occurs, in which case the Liability Cap will be 100% of the Contract Sum. We consider this level to be acceptable.

10.4. Part C: Land Issues

The Contractor (and Contractor Parties) will be granted a licence to exercise the Ancillary Rights to implement the Works. This is from the Commencement Date until the Actual Completion Date (or Termination Date if earlier). Following the Actual Completion Date, the Contractor (and Contractor Parties) will be granted access to the Facilities for the purposes of remedying defects, completion of Snagging Matters and investigating any thermal and/or energy deficiency.

Project Co pass condition risk down to the Contractor. The Contractor will not be entitled to make any claim against Project Co associated with incorrect or insufficient information being provided to it.

The Contractor is to be responsible for obtaining all Consents. This is passed down from Project Co, who takes the risk through the Project Agreement. There will be obligations on the Trust to discharge some of the planning conditions/reserved matters. These will be listed within the Project Agreement.

10.5. Part D: Design and Construction

The Contractor is to warrant that they have used, and will continue to use, the degree of skill and care in the design of the Facilities that would reasonably be expected of a competent professional designer experienced in carrying out design activities of a similar nature, scope and complexity to this scheme.

The requirement to achieve a BREEAM rating of "Excellent" has been recorded within the Construction Contract. The Contractor will require to progress any remedial work required if the rating is not achieved within [4] months after the Actual Completion Date.

At the date of Financial Close, the Contractor will confirm they have reviewed the Trusts requirements and the Project Co's Proposals (and subject to any qualifications/comments made) and the proposals meet the Trust's requirements in terms of Clinical Functionality.

Throughout the construction period, Project Co and the Service Provider will be required to review Reviewable Design Data (RDD) submitted by the Contractor. The Contractor will not be entitled to permit the construction of any part of the works which haven't been signed off by Project Co through the RDD process.

The Contractor is to establish and maintain a computerised design database associated with the Reviewable Design Data.

In the event of the Project Co Proposals not fulfilling the Trust Construction Requirements, the Contractor shall (at their own expense) amend the Project Co Proposals and rectify the Works.

The Contractor is to allow unrestricted access (subject to complying with all relevant safety procedures) to Project Co's Representative, the Funder's Technical Adviser, the Trust's Representative, the Independent Tester, the Service Provider Representative and the Surety Representative.

If the Project Co Representative (or Trust Representative) believes that any part of the Works are defective, then the Contractor can be requested to open up part of the works to prove they aren't defective. If they are found to be defective, the Contractor shall make good any defect. If the works are not found to be defective, the Contractor shall be entitled to a Delay Event (effectively, this provides the Contractor with time reimbursement).

In the event of failure to achieve completion by the planned Actual Completion Date, LADs will be applied at a rate of £[] per day.

There are a number of instances where the Contractor may be requested to provide a Recovery Report (where the Funders TA considers the works are in delay). These are:

- [20 months] after FC, if the Funders TA considers the Actual Completion Date will not be met, the Contractor is to issue an Initial Recovery Plan;
- [26 months] after FC, if the Funders TA considers the completion will not be met 6 months after the Actual Completion Date, the Contractor is to issue an Updated Recovery Plan;
- [32 months] after FC, if the Funders TA considers the Long Stop Date will be breached, the Contractor is to issue a Final Recovery Plan;

Project Co is to provide the Contractor with a draft Final Commissioning Programme, no later than 12 months prior to the Completion Date. The Contractor will then have to return their comments on this programme within 20 Business Days. The Final Commissioning Programme is then to be agreed within 10 Business Days of receipt of the Contractors comments.

The Contractor is to notify the Independent Tester, the Trust, the Service Provider Representative and Project Co of the planned date for completion, not less than 1 month prior to the anticipated completion.

The Contractor is to permit the Trust access to undertake the Trust's Commissioning prior to the Completion Date (in accordance with the Final Commissioning Programme).

Once the Certificate of Practical Completion has been issued by the Independent Tester, a Snagging Notice is to be issued by the Contractor within [4] Business Days. The Contractor will then have to rectify all Snagging Matters in accordance with the following timescales:

- Category 1 – 10 days;

- Category 2 – 40 days;
- Category 3 – 90 days.

Beyond these dates, the outstanding snags are to be recorded on the Helpdesk.

The Contractor is to issue the as built specification for the Works as soon as it is available. Within 60 Business Days after the Commissioning End Date, the Contractor is to make available all operation and maintenance manuals.

The Contractor shall complete Project Co's Post-Completion Commissioning activities within 60 Business Days of the Actual Completion Date. Once the Post-Completion Commissioning activities have been undertaken by the Contractor and the Trust, the Independent Tester is to issue the Commissioning Completion Certificate.

WiFi Post Completion Tests are to be carried out 3 months and 2 weeks following the Actual Completion Date. In the event of not achieving the WiFi Actual Completion Date 4 months and 2 weeks after the Actual Completion Date, the Trust may engage others to complete, with the costs being borne by the Contractor.

We note that actions associated with fossils, antiquities and human remains will result in a Trust Works Variation being issued.

10.6. Part E: Quality Assurance

The Contractor is required to procure that all aspects of the service delivery are consistent with BS EN ISO 9001/9002.

The Contractor is required to prepare the following Quality Plans:

- Design Quality Plan; and
- Construction Quality Plan.

Project Co and the Trust's Representative will be entitled to carry out audits of the Contractor's quality management system at intervals of 3 months.

10.7. Part F: Information Technology

This part of the Construction Contract has not been used.

10.8. Part G: Services

We have no technical comment to make on this Part of the Construction Contract.

10.9. Part H: Payment and Financial Matters

We would expect to see details of payment process and retention noted within this section of the Construction Contract.

In the event of an early completion (agreed with Project Co and the Trust), Project Co will pay a sum to the Contractor (amount to be agreed associated with net benefit to Project Co of early completion).

10.10. Part I: Changes in Law & Changes

We have no technical comment to make on this Part of the Construction Contract.

10.11. Part J: Delay Events, Relief Events and Force Majeure

We note the following are specified as Delay Events:

- The occurrence of a Trust Works Variation that would delay the completion;
- Any breach by the Trust of any of their express obligations in the Project Agreement;
- The execution of works on the Site not forming part of the Project Agreement by the Trust or any Contractors employed by the Trust;
- Opening up of the works which are found to not be defective;
- Force Majeure (war, civil war, armed conflict or terrorism; nuclear contamination; chemical or biological contamination; pressure waves caused by devices travelling at supersonic speeds); and
- A Relevant Change in Law.

These are passed down from the Project Agreement.

The occurrence of a Delay Event would provide the Contractor with time compensation only (an extension to the planned completion dates).

The Relief Events are passed down from Project Agreement level. If Project Co is granted relief at Project Agreement level, the Building Contractor will also be granted relief.

The occurrence of a Relief Event does not entitle the Contractor to compensation.

10.12. Part K: Termination

There are a series of Project Co Events of Default which can lead to termination of the Agreement by the Contractor. These include:

- Project Co failing to pay sums to the Contractor (£[] for a period of 30 Business Days);
- Project Co committing a breach of their obligations under the Agreement.

The list below provides details of some of the Contractor Events of Default:

- Insolvency of the Contractor or Guarantor;
- The Contractor failing to achieve the Actual Completion Dates by the Completion Long Stop Date ([12] months after Planned Completion Date);
- The Funders TA considering (after reviewing the Final Recovery Plan) the Contractor will not achieve the completion of works by the Completion Long Stop Date;
- The Contractor committing a material breach of its obligations which has a material and adverse effect on the delivery of the Trust Services;
- The Contractor abandoning the Agreement (ceasing to carry out the Works for 20 consecutive Business Days or 60 Business Days over a 12 month period);
- The Contractor failing to pay sums due to Project Co in excess of £[] for a period of 20 Business Days;
- Exceeding the Liquidated Damages Cap.

10.13. Part L: Miscellaneous

We have no technical comment to make on this Part of the Construction Contract.

10.14. Schedules to the Construction Contract

It is intended that the schedules to the Project Agreement will be flowed down to the Construction Contract, with inclusion of sub-contract specific drafting as appropriate. This will apply to the following schedules:

- Schedule 1 – Definitions and Interpretation;
- Schedule 2 – Completion Documents;
- Schedule 4 – Key Works Personnel;
- Schedule 5 – Disaster Plan;
- Schedule 6 – Funders' Direct Agreement;
- Schedule 7 – Land Matters;
- Schedule 8 – Construction Matters;
- Schedule 9 – The Programme;
- Schedule 10 – Review Procedure;
- Schedule 11 – Collateral Agreements;
- Schedule 12 – Outline Commissioning Programme;
- Schedule 13 – Equipment;
- Schedule 15 – Independent Tester Contract;
- Schedule 21 – Insurance Requirements;
- Schedule 22 – Change Protocol;
- Schedule 25 – Record Provisions;
- Schedule 26 – Dispute Resolution Procedure;
- Schedule 28 – Certificates;
- Schedule 34 – Insurance Proceeds Account Agreement;
- Schedule 35 – Commercially Sensitive Information;
- Schedule 36 – Independent Tester Certificate.

The following Schedules will relate only to the Construction Contract:

- Schedule 18 – Payment Mechanism (providing details on the cashflow profile to be paid to the Contractor);
- Schedule 37 – Collateral Warranties;
- Schedule 38 – Contractor Performance Guarantee;
- Schedule 39 – Obligations extracted from Funding Agreements;

- Schedule 40 – Interface Agreement;
- Schedule 41 – Surety Bond (if required)
- Schedule 42 – Letter of Credit.

10.15. Long Stop Date – Cost and Time of Replacement

We have considered the ease of replacement of the Building Contractor. We are satisfied that the contractual structure, market and contract pricing will ensure that, should it be required, competitive replacement providers could be suitably procured.

The ease of replacement is a factor of a number of issues:

- The number of potential alternate providers;
- The ability to get competitive quotes;
- Construction cost sufficiency; and
- Contingency levels.

Taking each point, firstly there are a number of construction providers active in the PFI market, for example, BAM Construction, Balfour Beatty, Laing O'Rourke, Skanska, Lend Lease, Sir Robert McAlpine, Morgan Sindall and Brookfield. This then should ensure that there will be good competition and hunger for such an opportunity should replacement be required.

Our review of the construction costs and the approach and allowances in relation to risk therein, indicates them to be acceptable for the project, and that an incoming contractor, who would need to carry the wrap on the D&B risks should, subject to their due diligence, be willing to accept the existing shape of the costs.

Time Implications

We estimate the worst case time periods for the re-tendering and appointment of a replacement contractor. The table below outlines our view of the re-tendering stages at different points in the programme.

Re-Tendering Stage	During First Quarter of Construction Period (T1)	During Mid Construction Period (T2)	During Final Quarter of Construction Period (T3)
1. Contract Resolution	Two Months	Three Months	Two Months
2. Amend Design Package	Two Months	Two Months	One Month

3. Tender/Award	Three Months	Three Months	Three Months
4. Site Mobilisation	One Month	One Month	One Month
Total Time Effect	Eight Months	Nine Months	Seven Months

We emphasise that this is not the period of delay, but the period of time to retender. Delay would be significantly mitigated, because upon termination, Project Co would appoint a specialist construction management company to run the site and appropriate sub-contracting parties, prior to the appointment of a construction contractor, who will then take full wrap on the construction risks in accordance with the contract. Carillion, as do all major contractors, operates by having their own management team and specialist consultants, who will manage the sub-contractors. In this way construction will not cease, the security of the site will be maintained, and the engagement of the sub-contractors will continue.

In consideration of longstop dates, we are satisfied that even if the contractor should be terminated, that the delay, should it be properly managed, will be well within the 18 month long stop date proposed for the Project Agreement and the 12 month proposed for the Building Sub-contract.

We comment on each stage of the re-tendering process that we would anticipate in such an event.

1 Contract Resolution:

This allows for the disentanglement of the previous contract and/or subcontracts including any determination, settlement of outstanding payments, a condition survey of the works completed and any other legal proceedings associated with the termination of the contract.

2 Amend Design Package:

At the point of termination, the original Contractor will have progressed with the implementation of the design packages. In order that the works can be re-tendered the original design packages will have to be amended to reflect the extent of the work completed and work in progress. At later stages in construction, design sign-off should be further advanced, and therefore the time implications would reduce.

3 Tender/Award:

This includes the preparation and issue of amended tender documentation (which would include the existing contractual documentation), the pricing of these tenders by the Contractors, evaluation and recommendation of the tender returns and the award of the contract.

4 Site Mobilisation:

Following contract award, the replacement Contractor will be required to introduce a management framework and appropriate resources to implement the works. A site establishment will also be created (which may be in place already and adopted) including health and welfare facilities for the site staff, plant hire and subcontractor appointment.

Delay Conclusion

We estimate that the worst case scenario to replace a contractor would take seven to nine months. This is unlikely to result in such a delay to the building contract, as Project Co, in an attempt to mitigate delay, will attempt to immediately appoint directly the existing sub-contractors and a temporary construction manager to co-ordinate on-going site works. The delay, in our opinion, is likely to be no worse than five or six months (if properly managed), well within the proposed long stop date in the project agreement and the building sub-contract.

Cost Implications

We examine below various areas of potential cost to estimate the total additional cost associated with contractor termination and replacement:

1. Additional inflation costs;
2. Administration costs;
3. Re-tendering costs;
4. General 10% cost increase; and
5. Liquidate and ascertained damages.

In assessing the cost implications we consider two scenarios:

Scenario 1 – a prudent estimate of additional cost of replacing a contractor over a 9 month period in an insolvency or default situation, where the site continues to be managed, resulting in a 6 month overall delay. This will probably support any proposed performance bond level funders may require.

1. Inflation Addition

A model has been prepared which identifies inflationary pressure on construction costs during a break in the construction programme. For our modelling we have used inflation indices based on the Tender Price Index (TPI) produced by the Building Cost Information Service (BCIS).

The model was run based on 9 month replacement period, during which time construction is still managed, resulting in a 6 month delay. The impact was assessed should this occur at every month of the contract. We took a view on how the cashflow would be amended considering reduced construction progress during the 9 month replacement period. The inflation increase would also apply to any increased construction costs we would anticipated later in the programme.

2. Administration Costs

In the event the project is delayed due to the requirement to replace a contractor or general delay, it is likely that administration costs would occur. The following table estimates costs during the general delay.

Party	Person Days / Month	Cost Per Month (@£750 per day)
Project Co	65	£ 48,750
Authority	20	£ 15,000
Funder/Equity	10	£ 7,500
TOTAL	95	£ 71,250

Over 9 months replacement period this would total £641,250 of cost, which would suggest a budget of £700,000.

3. Re-tendering Costs

There would be additional fees required to assist in the re-tendering of the existing package. These would include due diligence costs. We provide a broad fee estimate below:

Description	Fee
-------------	-----

Legal	£100,000
Financial	£100,000
Design (already substantially designed therefore minimal work should be required)	£500,000
TOTAL	£700,000

4. General Cost Increase

In the event of requiring to re-tender the project and appointing a replacement contractor, there is a likelihood that an allowance will be made to accommodate potential risks associated with completing another contractor's work and take the full design and build liability (not including inflation allowances covered above). Where, we model a 9 month retendering period, whilst on-going works continuing, resulting in a 6 month delay, we assume a 5% cost increase added to the remaining cashflow by the new building sub-contractor, reflecting the progression and compliance work done during that period (noting that additional prelims are including in the inflation calculation).

The costs allow for additional site preliminaries for the period of delay and we have made assumptions on the potential additional costs that may occur should contractor replacement occur later in the programme with less works required, but a new contractor may need to take the project risks at that stage.

5. Liquidate and Ascertained Damages

LAD levels have been agreed between Project Co and the Contractor, at c. £50k per day, equating to c. £1.5m per month, which we multiply by the 6 month delay.

Summary

We summarise the results in the table below, followed by a matrix of results relating to the worst case identified. This graph compares the cost of contractor replacement to 10% of the construction costs. As a percentage of the construction capex, contractor replacement is estimated to cost []%, indicating that the proposed performance bond levels will be sufficient

Cost Element	6 month delay
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	(month 3 replacement)
Inflation (+prelims)	£1,325,920
Administration	£1,400,000
Re-tendering	£1,000,000
Cost Increase	£9,790,673
LADs	£14,371,875
TOTAL	£27,888,468
%'age Capex	9.56%

Liability Cap

A 50% liability cap is also being provided in the Construction Contract. In assessing the sufficiency of the cap, we have taken the contractor replacement cost exercise and have considered extreme scenarios to assess what other events could be contained within that level.

The scenario we have chosen is using month 3 of the programme, with a full cessation of construction works for 9 months, with only preliminaries being paid and a resultant full 9 month delay to the overall construction programme.

1. Inflation Addition

We have considered a 9 month delay commencing in month 3 of the construction programme.

2. Administration Costs

Administration costs during the 9 month retendering double the previous estimate: £1.4m.

3. Re-tendering Costs

There would be additional fees required to assist in the re-tendering of the existing package. Assume £1m.

4. General Cost Increase

Where we have modelled a full 9 month break, we have assumed a contingency figure of 10% of remaining construction spend, reflecting the hands-off approach assumed during a complete works cessation, plus preliminaries during the period of delay.

5. *Liquidate and Ascertained Damages*

LAD levels have been agreed between Project Co and the Contractor, at c. £50k per day, equating to c. £1.5m per month, which we multiply by the 9 month delay.

Summary

As a percentage of the construction capex, contractor replacement and extreme scenarios relating to complete cessation of works is estimated to cost c. 19.44% of capex, well within the 50% liability cap.

Cost Element	9 month delay / cessation (month 3 replacement)
Inflation (+prelims)	£13,436,849
Administration	£1,400,000
Re-tendering	£1,000,000
Cost Increase	£26,513,631
LADs	£14,371,875
TOTAL	£56,722,355
%'age Capex	19.44%

10.16. Liquidate and Ascertained Damages

Project Co has issued details of how the Liquidate and Ascertained Damages (LADs) will be calculated. The actual quantum of these will be finalised once the final Financial Model is published immediately prior to Financial Close.

The method used to calculate the LADs is as follows:

Unitary Charge;

Less avoidable costs for SPV Operational Costs;

Less avoidable costs for FM Operating Costs;

Add Construction Phase FM costs;

Add Construction SPV costs (including insurances).

These are calculated over an 18 month period (which will cover the longstop date at Project Agreement level). The LADs are then worked out on a daily basis.

We consider the method used to generate the LADs to be suitable.

Based upon the current pricing levels (as at early May 2015), the LADs are working out at a daily rate of c. £52,500.

The LAD liability cap has been identified as 10% of the construction capex: $10 \times £291,802,476 = £29,180,247.6$. 18 months of LADs equals $365 \times 1.5 \times £52,500 = £28,743,750$. This indicates that the LAD liability cap is acceptable.

11. CONTRACT REVIEW – SERVICES CONTRACT

11.1. Introduction

The intent of the Services Agreement will be to pass the obligations of Project Co from Project Agreement level down to the Service Provider.

We note the following key terms:

- Within the Design and Build Agreement Heads of Terms, there is reference to the Contractor accepting the risks on site conditions including ground conditions, environmental conditions, climatic conditions and the state of existing works on the site. [We would normally expect to see a similar provision within the Services Agreement which will cover Project Co in the event of the Service Provider managing any variations during the operational phase.]
- The Service Provider will be paid the following:
 - Mobilisation costs;
 - Monthly Service Provider Payment subject to any deductions (on an n-1 basis);
 - Monies due for carrying out Lifecycle works.
- Any “excess” deductions will be carried forward to the next month.
- It is noted that Project Co (through the PA) will be obliged to submit a schedule of proposed programmed maintenance. As Project Co will be taking the lifecycle responsibility, we consider the requirement for Project Co to prepare this schedule to be suitable.
- We note the Service Provider will be responsible for providing the 5 year maintenance programme.
- Project Co will retain responsibility the sufficiency of the lifecycle fund (the split of lifecycle/asst replacement is to be established).
- The Contractor will be required to provide a security package which will consist of a parent company guarantee.
- The Service Provider will be required to take out and maintain third party and employer’s liability. Will they also be required to procure professional indemnity insurance?

- A number of Termination Events are listed, which we consider to be in line with market practice. We would normally expect to see a breach of health and safety included within the Termination Events.
- The liability of the Service Provider will be capped at:
 - 100% of the annual gross Service Provider Payments;
 - 200% of the annual services fee for termination ; and
 - Termination for Wilful Default will be ten years annual Service Provider Payments.

11.2. Introduction

We are in receipt of the draft Services Agreement between Project Co and Carillion (AMBS) Limited (the "Service Provider"). The intention is that the obligations of Project Co from the Project Agreement will be passed down to Carillion through the Services Agreement (on a back to back basis).

11.3. Part A: Preliminary

The Service Provider is to be provided with copies of the Project Agreement, the Construction Contract and the Funding Agreement. The Service Provider is to undertake not to cause a breach of any of these documents. Any breach by the Service Provider may result in Project Co incurring additional costs/liabilities which will be passed to the Service Provider.

The Project Operations (management and provision of Services) are to be performed:

- In accordance with Good Industry Practice;
- In a manner consistent with the Quality Plans;
- In a manner that is not injurious to health or will cause damage to property;
- In compliance with all Law and Consents;
- In compliance with all applicable NHS Requirements;
- In accordance with the Service Level Specifications.

11.4. Part B: General Provisions

The maximum liability of the Service Provider is to be 100% of the Service Provider Payment for the Contract Year. In the event of Termination, the Termination Cap will be 200% of the Service Provider Payment.

The Service Provider is to name his Key Works Personnel, who will have full authority to act on behalf of the Service Provider.

11.5. Part C: Land Issues

The Service Provider (and Service Provider Parties) will be granted a licence to exercise the Ancillary Rights from the Commencement Date until the Actual Completion Date (or Termination Date if earlier). Following the Actual Completion Date, the Service Provider (and Service Provider Parties) will be granted access to the Facilities for the purposes of carrying out the Project Operations. This access will terminate upon the Expiry Date (or the Termination Date).

Project Co pass ground condition risk down to the Service Provider. The Service Provider will not be entitled to make any claim against Project Co associated with incorrect or insufficient information being provided to it.

The Service Provider is to be responsible for obtaining all Consents required for the Project Operations. This is passed down from Project Co, who take the risk through the Project Agreement.

11.6. Part D: Design and Construction

In the event of the Service Provider having to undertake any works, they have to warrant that they have used, and will continue to use, the degree of skill and care in the design of the Facilities that would reasonably be expected of a competent professional designer experienced in carrying out design activities of a similar nature, scope and complexity to this scheme.

Prior to the Actual Completion Date, the Service Provider is to carry out their activities to enable them to commence the delivery of the Services at the Actual Completion Date.

11.7. Part E: Quality Assurance

The Service Provider is required to procure that all aspects of the service delivery are consistent with BS EN ISO 9001/9002.

The Service Provider is required to prepare the Services Quality Plans.

Project Co and the Trust's Representative will be entitled to carry out audits of the Service Provider's quality management system at intervals of 3 months.

11.8. Part F: Information Technology

This part of the Services Agreement has not been used.

11.9. Part G: Services

3 months and 2 weeks prior to the Completion Date, the Service Provider is to provide the Schedule of Programmed Maintenance for the first year (then each year, the Schedule is to be submitted 3 months prior to the anniversary of the Completion Date). The Project Agreement requires the Schedule to be submitted 3 months in advance, therefore a window may need to be added to ensure Project Co has time to review this prior to submission to the Trust.

The 5 Year Maintenance Plan is to be provided [40] Business Days prior to the Completion Date (and each year thereafter). At Project Agreement level, this is to be provided 30 Business Days prior to the Completion Date (and each year thereafter).

The Service Provider is to submit the Outline Lifecycle Schedule to Project Co 60 Business Days prior to the start of each Reference Period (period of 5 years). The Service Provider will then undertake these works (and take the risk on this). The Service Provider is entitled to defer an element of Lifecycle (and must provide 40 Business Days noticed to Project Co if it intends to do this). The Service Provider is to issue invoices to Project Co on a monthly basis for the Lifecycle activities (including a comparison against the Updated Lifecycle Schedule).

At the end of each Reference Period, there is a Painshare/Gainshare mechanism. In the event of actual costs being less than the Outline Lifecycle Schedule, the Service Provider will be entitled to a 50% share of the difference. In the event of the Cumulative Lifecycle Costs exceeding the Outline Lifecycle Schedule, the Service Provider will be liable for the costs (lesser of £4m and 30% of the loss).

Each quarter, the Service Provider is to provide a report to Project Co detailing the expenditure on lifecycle.

When the Service Provider submits their 5 Year Maintenance Plan, they are entitled to issue details on which works may be deferred. This is then to be agreed with Project Co.

In the event of Lifecycle works being in excess of £25k, the Service Provider shall, if requested by Project Co, tender the works (and will manage the tender process).

The Service Provider will be paid a management fee for the lifecycle works:

- 10% of contract price where works are anticipated to be less than £100k;
- 9% where the costs are anticipated to be between £100k and £200k;
- 8% where costs are anticipated to be in excess of £200k.

We note the contract is self monitoring and that the Trust and Project Co can carry out sample checks.

A Warning Notice can be issued if:

- The Service Provider commits a material breach of its obligations;
- Total SFPs exceed the levels set out within the Payment Mechanism.

If 3 or more Warning Notices are issued in a 6 month period, Project Co is entitled to increase their monitoring of the Service Provider.

The Service Provider is to be responsible for undertaking the Customer Satisfaction Survey.

It is anticipated there will be employee transfers on the scheme. We suggest the drafting for TUPE is reviewed by an employment lawyer.

Project Co and the Trust have the right to refuse admittance to the site or order removal of any person employed by the Service Provider or any sub-contractor that is likely to have an effect on the provision of Trust Services.

All equipment/material used in providing the services are:

- Maintained in a safe and serviceable condition;
- Of the type specified in the Service Level Specification or Method Statements;
- In compliance with rules, regulations, codes of practice and/or British or European Standards.

11.10. Part H: Payment and Financial Matters

Clause 35 details the invoices and Monthly Service Report to be submitted by the Service Provider along with the associated timescales.

11.11. Part I: Changes in Law & Changes

We have no technical comment to make on this Part of the Services Agreement.

11.12. Part J: Delay Events, Relief Events and Force Majeure

The following are classed as Relief Events:

- Fire, explosion, lightning, storm, tempest, flood, bursting or overflowing of tanks, apparatus or pipes, ionising radiation, earthquake, riot or civil commotion;
- Failure by a statutory undertaker, utility company, local authority or other party to carry out works or provide services;
- Accidental loss or damage to the Works and/or Facilities or any roads servicing them;
- Failure or shortage of power, fuel or transport;
- Blockage or embargo falling short of Force Majeure;
- Discovery of fossils, antiquities and human remains;
- Official or unofficial strike, lockout, go slow or other dispute affecting the construction, building maintenance or facilities management industry.

These Relief Events are passed down from the Project Agreement.

The occurrence of a Relief Event does not entitle the Service Provider to compensation.

11.13. Part K: Termination

There are a series of Project Co Events of Default which can lead to termination of the Agreement by the Service Provider. These include Project Co failing to pay sums to the Service Provider an amount of £[] for four months from receipt of a notice of non-payment.

The list below provides details of some of the Service Provider Events of Default:

- Insolvency of the Service Provider;
- The Service Provider causing Project Co to commit a material breach of their obligations under the Project Agreement;
- The Service Provider committing a material breach which results in a health and safety conviction after the Actual Completion Date;
- The Service Provider failing to pay sums due to Project Co in excess of £[500,000] for a period of 60 Business Days;
- Suffering Service Failure Points of [5,491] in a 6 month rolling period or [8,038] in a 12 month rolling period;
- Liability of the Service Provider equal to or exceeds the Liability Cap.

11.14. Part L: Miscellaneous

We have no technical comment to make on this Part of the Services Agreement.

11.15. Schedules to the Project Agreement

It is intended that the schedules to the Project Agreement will be flowed down to the Services Agreement, with inclusion of sub-contract specific drafting as appropriate. This will apply to the following schedules:

- Schedule 1 – Definitions and Interpretation;
- Schedule 2 – Completion Documents;
- Schedule 5 – Disaster Plan;
- Schedule 6 – Funders' Direct Agreement;
- Schedule 7 – Land Matters;
- Schedule 8 – Construction Matters;
- Schedule 10 – Review Procedure;

- Schedule 11 – Collateral Agreements;
- Schedule 13 – Equipment;
- Schedule 14 – Service Requirements;
- Schedule 18 – Payment Mechanism;
- Schedule 19 – Financial Model;
- Schedule 21 – Insurance Requirements;
- Schedule 22 – Change Protocol;
- Schedule 24 – Handback Procedure;
- Schedule 25 – Record Provisions;
- Schedule 26 – Dispute Resolution Procedure;
- Schedule 30 – Employee Information;
- Schedule 31 – Proposed Workforce Information;
- Schedule 32 – Pensions;
- Schedule 35 – Commercially Sensitive Information;

The following Schedules will relate only to the Services Agreement:

- Schedule 37 – Outline Lifecycle Schedule;
- Schedule 38 – Service Provider's Performance Guarantee;
- Schedule 39 – Obligations extracted from Funding Agreements;
- Schedule 40 – Interface Agreement

11.16. Cost and Time of Replacement

In this section we consider both the ability to replace the FM Provider and consider the liability caps required under the Service Contract.

We do not consider the potential to have to re-tender the Service Contract to represent a significant risk to Project Co, either in terms of performance or cashflow. We outline the basis for this below.

- Benchmarking of FM Costs - we are satisfied that the base monetary amounts are acceptable for commercial delivery of the services by any service provider.
- Payment Mechanism – we are satisfied that the output specifications are deliverable and that the Payment Mechanism should not unduly penalise a properly performing provider.

- Service Provider Market - should a re-tendering be required we are sure that there would be a receptive market. PFI is a mature procurement option, especially with regard to the provision of well understood hard FM services, establishing a market base from which tenders could be sought.

The agreed Service Contract indicates the following liability caps:

- The annual deductions are to be capped at 100% of the FM Fee; and
- The termination cap will be 200% of the FM Fee.

This is in accordance with market norms, and is further supported by our modelling, which we consider to have utilised prudent assumptions, which underpins the cap proposed.

Time to Tender the Service Contract

We suggest that the timescales for retendering a Service Contract could be as follows:

Section	Stage	Minimum Time	Maximum Time	Comment
1	Modify Tender Document	2 weeks	3 weeks	
2	Re-tender	8 weeks	8 weeks	Likely to be a fast track selection and briefing process.
3	Tender Appraisal / clarification	4 weeks	6 weeks	
4	Place Order	3 weeks	4 weeks	
5	Mobilise	2 weeks	3 weeks	
	TOTAL	19 weeks	24 weeks	

For the entire replacement we would anticipate a time period of between 5 and 6 months. Thankfully, very few PFI projects have experienced this directly to provide specific empirical data, however we have some experience that indicates the following approximate data:

- Project 1 – capex £12m. FM replacement 1.5 months.
- Project 2 – capex £60m. FM replacement 4.5 months.

Project 2 required significant due diligence as it was a termination scenario and may represent a suitable model for this exercise. We will assume a six month period which we consider to be suitably conservative for the costing exercises below.

Cost Implications of Finding Alternative FM Service Provider

We have considered six areas of cost:

- Administrative and management time during the 6 month replacement period;
- Start up costs for a new contractor;
- Additional FM Costs during the 6 month period;
- Additional contingency priced by replacement contractor;
- Cost increase to market costs, i.e. sector inflation; and
- Payment Mechanism deductions during the 6 months.

Administrative and Management Time

The costs associated with this aspect are difficult to estimate and may vary considerably depending on the circumstances. There will be Health Board, Project Co, Funder, Equity and Project Staff. We have assumed a notional resourcing month by month to cover this, which will include interim management of the FM service whilst the FM Service Provider is being replaced.

Start Up Costs

There will still be the need for training, familiarisation, help desk establishment, tendering, etc. This will be less than a typical start up costs as certain aspects of the service will be in place. Suggest £50,000.

Prime Cost

We are making the assumption that though the original cost of providing the service is paid for through the overall Services Payment that during the interim period prior to full replacement of the FM

Provider that there will generally be increased costs to reflect the disruption and lack of co-ordination. We assume an additional up-lift of 10% over the 6 months.

Reactive Cost Risk

Additionally, we are going to assume a scenario that at re-tendering the new bidders decide that they need additional staff to allow proper delivery of the service. Similarly, there may be an additional contingency allowance to reflect the reaction to the payment deductions that may have been suffered by the previous sub-contractor. We assume an additional 5%.

We then take the base fee, increase by the reactive cost, and then inflate at AWE (Average Weekly Earnings) index as a prudent allowance and compare the resultant FM fee each year to the original fee increased with RPI's. We then discount this to an NPV at 2%, which is considered a prudent discount level to reflect interest accruing.

Payment Mechanism Deductions

We have assumed that during the 6 month replacement period that a poor scenario of deductions would occur, which typically equates to the OHP proportion of the hard FM fee for each month of the 6 month period.

Our model indicates a possible replacement cost of 163% of the annual FM Service Payment, within the 200% termination related cap. We summarise our results below.

Cost Element	Hard FM
Administrative and Management Time	£ 374,400.00
Start Up Costs	£ 50,000.00
Prime Costs	£ 142,513.60
Indexation Risk (c. 0.5%)	£ 1,517,717.00
Market Price Increase (10%)	incl
Deductions (x6)	£ 2,565,244.80
TOTAL	£ 4,649,875.40

FM Fee	£2,850,272.00
Termination Liability Cap (200%)	£5,700,544.00

Cost as a Percentage of the Fee	163.14%
---------------------------------	---------

12. CONTRACT REVIEW – INTERFACE AGREEMENT

[An interface agreement will be agreed between Project Co, FM (Carillion (AMBS) Ltd) and construction (Carillion Construction Ltd)]

At this stage it is intended that it will be based directly on the contract agreed at the Royal Liverpool Hospital project, but is otherwise at an early stage of drafting and can be finalised at a later stage]

13. CONTRACT REVIEW – COMMON TERMS AGREEMENT

[Preferred bidder post funding competition]

14. INSURANCES

1.2. Project Co

[Preferred bidder]

1.3. Construction Contractor

[Preferred bidder]

15. EQUATOR PRINCIPLES

'The Equator Principles' are a financial industry standard established in order to ensure that the Projects financed by EPFIs (Equator Principles Financial Institutions) "are developed in a manner that is socially responsible and reflects sound environmental management practices ... recognise the importance of climate change, biodiversity, and human rights, and believe negative impacts on project-affected ecosystems, communities, and the climate should be avoided where possible. If these impacts are unavoidable they should be minimised, mitigated, and/or offset. The current set of 'principles' at this time are dated June 2013 and can be downloaded from www.equator-principles.com.

"The Equator Principles are intended to serve as a common baseline and framework. [EPFIs] commit to implementing the Equator Principles in [their] internal environmental and social policies, procedures and standards for financing Projects. [They] will not provide Project Finance or Project-Related Corporate Loans to Projects where the client will not, or is unable to, comply with the Equator Principles.

Any applicable project requires to be categorised as follows (taken from the guidelines). We note and explain further below, that we consider this project to be a Category C project.

As part of their review of a project's expected social and environmental impacts, EPFIs use a system of social and environmental categorisation, based on IFC's environmental and social screening criteria, to reflect the magnitude of impacts understood as a result of assessment.

These categories are:

- Category A – Projects with potential significant adverse social and/or environmental impacts that are diverse, irreversible or unprecedented;
- Category B – Projects with potential limited adverse environmental and social risks and/or impacts that are few in number, generally site-specific, largely reversible and readily addressed through mitigation measures; and
- Category C – Projects with minimal or no adverse environmental or social risk and/or impacts.

In consideration of compliance of this project with the Equator Principles, we make the following observations from a technical perspective.

1. The project relates to >US\$100m of capital costs.

2. This is a Category C project: being a hospital project it is designed for positive social and environmental consequences; for the benefit of clinical services and healthcare provision for the local population.
3. As the project is deemed a Category C project, there is no requirement to prepare a detailed 'Environmental and Social Assessment' and associated work in accordance with the guidelines.

APPENDIX 1
SCOPE OF SERVICE

1. Stage 2: Post Evaluation of Draft Final Bids

This stage shall take place after the Trust has evaluated the Draft Final Bids and has declared them compliant. This stage is expected to start on 27 April 2015 and must be complete by 25 June 2015.

It is currently envisaged that this scope of work will apply only to one (1) bidder. The Trust, however, reserves the right to have the Consultant assess other bids, for example, should the identity of the bidder (identified in the Appointment Business Case) change. In this event the Consultant may recover additional costs to the extent that work completed to date is rendered redundant.

The Consultant shall review the technical documents in the final bid submission and preferred solution of the bidder which the Trust is minded to take forward to appoint.

The Consultant shall review all relevant information provided by the relevant bidder by way of its final bid submission, clarification(s) issued and supporting documentation (including any commentary and mark up of the Project Agreement and Schedules).

In particular the advisor shall fully review the Trust's Construction Requirements and the Contractor's Proposals for compatibility and risk allocation, together with associated Service Requirements.

The Consultant shall discuss matters with the bidder and the Trust where appropriate and necessary to ensure the TA fully discharges the obligations of appointment under this scope of duties.
At the end of this period, the Consultant shall produce a written report detailing its findings.

The Consultant shall share their final draft of the report with the Trust and bidder and provide an opportunity to discuss the report with them prior to it being finalised.

The Consultant's report shall as a minimum cover its finding following the undertaking of the following tasks / issues which shall be undertaken by the Consultant. The Consultant is expected to highlight all the interrelated technical, commercial and funding issues as known to the Consultant.

1.1 Project Contract Documents

Review the proposed contractual structure and the effectiveness of risk transfer to principal sub-contractors (i.e. the Design and Construct and Facilities Management subcontracts), including specific commentary on the how far this process has been progressed in detail by the Bidder at this stage.

Update report to reflect the latest allocation of technical risks in the Project Agreement. Comment should be made on where the allocation is considered to be onerous on the Contractor or not in line with current market practice.

Review of the pass down of risks to the Design and Construction Subcontract including but not limited to payment, design liability, long stop date, liquidated damages, change control, defects liability, liability caps and warranties.

Review of the pass down of risk to the Facilities Management Subcontract including but not limited to payment, indexation, payment mechanism obligations (deductions and failure points) liability caps, disputes resolution, benchmarking, change control and performance monitoring

Review of proposed interface agreement between the Design and Construction Subcontract and the Facilities Management subcontract.

1.2 Project Stakeholders

Assess and comment on the ability of the key subcontractors to perform their obligations for the Project from a technical and capacity perspective.

Comment on the organisational structure adopted both pre and post completion of construction

1.3 Costs

A review of the adequacy of the design, construction and demolition costs based on the specific requirements of the proposed design and also with reference to market rates and published benchmarks, including consideration of indexation. This review shall include identification and highlighting of any costs against which significant risk contingencies have been allowed, a commentary on the appropriateness of such contingencies and a summary of those costs considered by the Bidder to be provisional and price sensitive to the Trust further downstream in the procurement process. Commentary shall also be provided on the risk of cost over-runs.

A review of the adequacy of the facilities management costs based on the specific requirements of the proposed service and also with reference to market rates and published benchmarks. Consideration of the assumptions behind and proposals for any third party income shall also be covered. The overall review shall include identification and highlighting of any costs against which significant risk contingencies have been allowed, a commentary on the appropriateness of such contingencies and a summary of those costs considered by the Bidder to be provisional and price sensitive to the Trust further downstream in the procurement process.

A review of the adequacy of the lifecycle costs based on the specific requirements of the proposed design, including a comparison against market rates and published benchmarks. The review shall also cover the adequacy of the contractual provisions to manage the lifecycle fund.

1.4 Design

A review of the Bidder's design proposals, with particular reference to the following:

- 1.4.1 How well developed the design is for this stage of the process;
- 1.4.2 How well the designs satisfy the Trust's performance specification and the relevant safety, fire compliance and regulatory standards;
- 1.4.3 How the design and ITPD proposals in general have addressed the site related issues. Particular reference is required to existing site constraints, including the retention of the existing energy centre, buried services, geotechnical and contamination issues;
- 1.4.4 The key areas of design development required between the time of review and Financial Close, and thereafter;
- 1.4.5 In areas where the design is still subject to development, a summary of the residual risks to both the Trust and the Contractor shall be provided;
- 1.4.6 The proposed Energy Target for the Facilities, including its robustness and how the target has been calculated / derived; and

1.4.7 A summary of design issues which are still subject to commercial caveat by the Bidder

1.5 Construction & Demolition

A review of the adequacy of the construction and demolition programme and methodology including in respect of asbestos and other deleterious materials. Specific consideration to be given to the adequacy of any proposed performance/delay Liquidated Damages.

Specific consideration shall be given to any areas of the programme that represent a significant chance of delay, and the associated risks of contractor replacement.

The review shall also in particular include reference to the periods of commissioning and handover with the Trust and the impact of any planned phasing on the completion of the Facilities and the occupation by the Trust.

Assess the capability of the professional team, building contractors and material subcontractors to perform under the contracts.

1.6 Planning and Other Consents

A review of planning status of the Project shall be undertaken.

This shall include, as a minimum, consideration of the following:

- 1.6.1 Commentary on the consistency of the developed design with the outline planning permission obtained by the Trust
- 1.6.2 A review and summary of the principal planning risks that remain, including taking into account any evidence provided by the planners with respect to their support of the proposals
- 1.6.3 Commentary on the level of design detailed and how much work would be required in order to progress to submission of the detailed planning application, and
- 1.6.4 A summary of any Bidder caveats with respect to planning permissions

A high level review of other statutory consents is also required, in terms of the likelihood of the submission to comply. Particular reference to the design fire strategy is required.

1.7 Facilities Management Proposals

A review of the Bidders' proposals against the Trust's service specifications is required. In particular, consideration shall be given to the following issues:

- 1.7.1 How well the Bidder's FM proposals satisfy the requirements of the Trust and the capability of the Bidder to perform under the contract;
- 1.7.2 The appropriateness and robustness of the staffing arrangements proposed in terms of capacity and experience;
- 1.7.3 The principal risks which may lead to the potential replacement of the FM provider;
- 1.7.4 How the Bidder has or proposes to address key interface issues between Trust and the Contractor services and the individual Contractor service providers (if relevant); and
- 1.7.5 How well the Bidder's FM proposals satisfy the requirements for the Interim Services and Retained Facilities.

1.8 Payment Mechanism

A review of the Bidder's payment mechanism and its interaction with Schedule 14 Output Specifications. Comment is required on the calibration of the Payment Mechanism.

Such review should address the following:

- 1.8.1 Adequacy, fairness and operability of the payment mechanism in practice (including an assessment of the likelihood and value of deductions as a result of poor performance or unavailability and sensitivity analysis thereof);
- 1.8.2 Trust's performance criteria and a review of the assumptions proposed by the FM provider;

1.8.3 Service point, warning notice, termination thresholds and the Contractor remedial rights included in the Project Agreement;

1.8.4 Energy mechanism and risk profile; and

Sensitivity analysis on the likelihood and value of deductions as a result of unavailability or performance failure.

1.9 Financial Model

Review and opine on the assumptions used in the cashflow models during construction phase and operational phase, in particular in relation to the timing and amount of property and related costs and FM services.

Comment on the adequacy of the level of reserves accruing on the Maintenance Reserve Account to meet relevant liabilities as they fall.

1.10 Maintenance and Facilities Management

Comment on the proposed maintenance and equipment replacement programme and related contracts and cost forecasts as included in the financial model to be prepared by the Consortium.

Comment on the achievability of the output / service level specifications and the capability of the FM provider to conform to such specifications based on their proposed methodology.

Comment on the achievability of the availability level assumed in the financial forecasts.

Comment on the forecast costs of FM services and any price adjustment, benchmarking or market testing mechanisms.

Comment on the service start-up programme.

Environmental

Comment on the ground condition reports and any environmental impact of the scheme and its compliance with existing and anticipated legal and regulatory requirements.

Risk Analysis

Assess and, so far as possible, quantify the main technical risks to the Consortium which could impact on the cost or completion date of the facilities or on the costs through the project life.

Advise on any other matters which, in the opinion of the Consultant, a prudent funder should be made aware of.

General and Reporting

Liaise with the Bank's Legal and Insurance Advisors and other Consultants as required and attend meetings with the Preferred Bidder and Trust to discuss findings and written reports. Prepare a written report covering the above areas.

The Stage 2 report shall be addressed to the Trust and the Funder (or reliance shall be extended to the Funder when appointed) and shall also be made available to Bidders

APPENDIX 11b – OJEU NOTICE

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case



European Union
 Publication of Supplement to the Official Journal of the European Union
 2, rue Mercier, 2985 Luxembourg, Fax: +352 29 29 42 670
 Luxembourg
 E-mail: ojis@publications.europa.eu Info & on-line forms:
<http://simap.europa.eu>

CONTRACT NOTICE

Section I: Contracting authority

Name, addresses and contact point(s)

Official name Sandwell and West Birmingham Hospitals NHS Trust – Midland Metropolitan Hospital		National ID	
Postal address Project Office, Midland Metropolitan Hospital Project, Sandwell and West Birmingham Hospitals NHS Trust, Management Block, City Hospital, Dudley Road			
Town Birmingham		Postal code B18 7QH	Country UK
Contact point(s) Project Office For the attention of Daphne Lewsley		Telephone +44 1215075566	
E-mail mmh.projectoffice@nhs.net		Fax	

Internet address(es) if applicable

General address of the contracting authority URL

http://swbh.nhs.net

Address of the buyer profile URL

Electronic access to information URL

Electronic submission of tenders and requests to participate URL

Please use Annex A to provide more detailed information

Further information can be obtained from

- The above mentioned contact point(s)

Specifications and additional documents (including documents for competitive dialogue and a dynamic purchasing system) can be obtained from

- The above mentioned contact point(s)

Tenders or requests to participate must be sent to

- The above mentioned contact point(s)

I.2) Type of the contracting authority

Authority

- Body governed by public law

Other (please specify)

Activity

- ☐ General public services
- ☐ Defence
- ☐ Public order and safety
- ☐ Environment
- ☐ Economic and financial affairs
- Health
- ☐ Housing and community amenities
- ☐ Social protection
- ☐ Recreation, culture and religion
- ☐ Education

Other (please specify)

The contracting authority is purchasing on behalf of other contracting authorities

☒ no

Section II: Object of the contract

II.1) Description

II.1.1) Title attributed to the contract by the contracting authority

The Midland Metropolitan Hospital Project

II.1.2) Type of contract and location of works, place of delivery or of performance (choose one category only – works, supplies or services – which corresponds most to the specific object of your contract or purchase(s))

☒ Services

Type

Type

Service category No: (Please see Annex C1 for service categories)

☒ 14: Building-cleaning services and property management services

Main site or location of works, place of delivery or of performance:

The Trust expects the Facilities (as more fully described in II.1.5) will be delivered at Grove Lane, Smethwick, West Midlands, but reserves the right to incorporate other sites within the scope of the project (although does not envisage doing so as this stage).

NUTS code

UKG34

Information about a public contract, a framework agreement or a dynamic purchasing system (DPS)

The notice involves a public contract

☒ The notice involves a public contract

The notice involves the setting up of a dynamic purchasing system (DPS)

☐ The notice involves the setting up of a dynamic purchasing system (DPS)

The notice involves the establishment of a framework agreement

☐ The notice involves the establishment of a framework agreement

II.1.4) Information on framework agreement (if applicable)

Number

or (if applicable) maximum number of participants to the framework agreement envisaged

Duration of the framework agreement

Duration in years

or in months:

Justification for a framework agreement, the duration of which exceeds four years:

Estimated total value of purchases for the entire duration of the framework agreement (if applicable, give figures only)

Estimated value excluding VAT:

or Range: between

and

Currency:

Frequency and value of the contracts to be awarded: (if known)

II.1.5) Short description of the contract or purchase(s)

Sandwell and West Birmingham Hospitals NHS Trust (the 'Trust') is seeking tenders for the design, construction (to include the provision of information management and technology infrastructure (but excluding end user equipment and systems)) and maintenance of a new inpatient and acute treatment hospital on a brownfield site at Grove Lane, Smethwick, West Midlands (the 'Facilities'). The Facilities are a key part of the Right Care Right Here programme for improving healthcare in the local health economy. The Trust proposes to procure the Facilities through the UK Government's new approach to the delivery of private finance into public infrastructure and services, known as PF2.

The new acute hospital Facilities (expected to be approximately 80,000 m2) to be designed, constructed and maintained by the successful Bidder are expected to provide for a range of core and support services to include but not limited to: A&E, maternity, childrens' services, critical care, diagnostics and the full range of acute hospital services and with the latest technology and equipment.

The Trust has developed an Exemplar Design for the Facilities, the purpose of which is to provide Bidders with a comprehensive explanation of the Trust's requirements and expectations in regard to the design of the Facilities. Bidders are not required to simply accept the Exemplar Design as is and all design risk will still pass to the Contractor; however, Bidders should view it as being a very clear indication as to how the Trust would hope the final design of the Facilities would progress. Bidders will be challenged during the procurement process to interpret, develop and improve the Exemplar Design wherever possible.

The contract is also likely to include Hard Facilities Management ('FM') services and lifecycle maintenance over the operational life of the Facilities, but will not include soft FM services or sterile services. Prospective bidders should be aware that the Trust reserves the right during the first five year period of the concession to vary the contract to provide for the delivery of selected hard FM services

elsewhere in the Trust's estate. The Trust is not obligated to exercise this option nor is the contractor obliged to undertake the service.

The Trust envisages that the successful contractor will be required to provide certain equipment, such as fixtures and fittings normally associated with a contract of this type, but that a full Managed Equipment Service will not be required. The Trust expects that the successful contractor will be responsible for the design, installation and maintenance of a wireless network and other network infrastructure, although the Trust will retain responsibility for the operation of a single converged network.

Whilst, it is not currently envisaged that the successful contractor will be required to undertake land remediation at the site (which the Trust anticipates will form part of a separate competition), the Trust reserves the right to bring land remediation within the scope of the current agreement at any stage if deemed appropriate.

Under PF2, when an authority such as the Trust begins its procurement process, it will advise prospective bidders whether the Government wishes to have the right to invest in shares and shareholder debt in that project and the percentage the Government would invest. The Government will undertake due diligence prior to financial close to determine if it wishes to make that investment by reference to H M Treasury's eligibility criteria for PF2 equity investment. The Trust reserves the right to require the successful contractor to hold senior debt and equity funding competitions at Preferred Bidder stage.

All interested parties are required to obtain, complete and return a Pre-Qualification Questionnaire ('PQQ') and associated Memorandum of Information from the contact point at section I.1. PQQ responses will be evaluated in accordance with the criteria set out in the Trust's PQQ Evaluation Methodology. Prospective bidders should note that the Trust will hold a Bidders Launch event on 21 July 2014. Further information on this event, including registration details, can be found in the Trust's Memorandum of Information.

II.1.6) Common procurement vocabulary (CPV)

	Main vocabulary	Supplementary vocabulary if applicable
Main object	71000000	
Additional object(s)	45300000	
	45213312	
	45400000	
	45210000	
	65000000	

	79993000	
	45314300	
	45000000	
	77314000	
	45112700	
	45215000	
	50700000	
	90911300	
	90922000	
	32571000	
	45215100	

II.1.7) Information about Government Procurement Agreement (GPA)

The contract is covered by the Government Procurement Agreement (GPA)

☒ yes

II.1.8) Lots (for information about lots, use Annex B as many times as there are lots)

This contract is divided into lots:

☒ no

II.1.9) Variants will be accepted

☒ yes

II.2) Quantity or scope of the contract

II.2.1) Total quantity or scope: (including all lots, renewals and options, if applicable)

The estimated total capital value of the project relating to this contract notice is in the region of £285 million GBP exc. VAT (including traditional and PF2 funded components at current day prices).

(if applicable, give figures only) Estimated value excluding VAT:

or Range: between

and

Currency:

II.2.2) Options (if applicable)

☒ yes

(if yes) Description of these options:

The Trust reserves the right to procure repeat requirements of a similar nature without a further call for competition pursuant to Article 31(4)(b) of Directive 2004/18/EC and Regulation 14(1)(d)(ii) of the Public Contracts Regulations 2006 (as amended).

The Trust reserves the right to extend the contract duration subject to a value for money assessment, market conditions or other factors that may affect the contract period.

As noted above, the Trust reserves the right during the first five year period of the concession to vary the contract to provide for the delivery of selected hard FM services elsewhere in the Trust's estate. The Trust is not obligated to exercise this option nor is the contractor obliged to undertake the service.

Again, as noted above, the Trust also reserves the right to bring land remediation within the scope of the current arrangement.

(if known) Provisional timetable for recourse to these options:

in months:

or in days: (from the award of the contract)

II.2.3) Information about renewals (if applicable)

This contract is subject to renewal

☒ no

Number of possible renewals: (if known)

or

Range: between

and

(if known) In the case of renewable supplies or service contracts, estimated timeframe for subsequent contracts:

in months:

or in days (from the award of the contract):

II.3) Duration of the contract or time limit for completion

Duration in months:

360

or in days: (from the award of the contract)

or Starting (dd/mm/yyyy)

Completion (dd/mm/yyyy)

Section III: Legal, economic, financial and technical information

III.1) Conditions relating to the contract

III.1.1) Deposits and guarantees required: (if applicable)

The Trust reserves the right to request deposits, guarantees, parent guarantees or other forms of security.

III.1.2) Main financing conditions and payment arrangements and/or reference to the relevant provisions governing them

The project is considered suitable for the application of the UK Government's PF2 programme. Payments will be made as determined by a Payment Mechanism which will form part of the main contractual agreement.

The Government will have the right, but not the obligation, to invest in shares and shareholder debt. The Trust reserves the right to require the successful contractor to hold funding competitions for both the Equity and Senior Debt elements of the project, in accordance with PF2. In addition, the Trust reserves the right to require the successful contractor to involve the European Investment Bank funding in the project.

III.1.3) Legal form to be taken by the group of economic operators to whom the contract is to be awarded: (if applicable)

Consortia tenders are acceptable, however the Trust reserves the right to require groups of contractors to take a particular legal form or require a single contractor to take primary liability and/or require that each party undertakes joint and several liability. This may include a requirement to establish a special purpose vehicle.

III.1.4) Other particular conditions (if applicable)

The performance of the contract is subject to particular conditions

☒ yes

(if yes) Description of particular conditions:

The Trust intends to include obligations within its contract documentation relating to workforce matters and in particular conditions that relate to the Transfer of Undertakings and Protection of Employment (TUPE). Such obligations will require the successful contractor to comply with the contractual terms set out within the contract documents which reflect UK and EU Law. Bidders will be required to take account of these obligations in preparing their bid and discussing the contract through the dialogue stage.

It is intended that this project acts as a catalyst for the economic and social regeneration of the Smethwick area. Accordingly, the successful contractor will be expected to actively participate in achieving these objectives, and therefore contract performance conditions may relate to social and environmental considerations. Bidders' technical capability to meet these requirements will be assessed at the pre-qualification stage and criteria which assess the manner in which the successful contractor meets these requirements may also be included within the contract award criteria. Further details will be provided, where relevant, in the Pre-Qualification Questionnaire suite of documents, the Invitation to Participate in Dialogue and the Contract Documents.

Further, the Trust reserves the right to include provision for periodic efficiency review conditions to be included in the contract documents, in line with PF2

requirements.

III.2) Conditions for participation

III.2.1) Personal situation of economic operators, including requirements relating to enrolment on professional or trade registers

Information and formalities necessary for evaluating if the requirements are met:

In accordance with Articles 45 to 50 of Directive 2004/18/EC and Regulations 23 to 25 of the Public Contracts Regulations 2006 (as amended). The Trust has also set out such information within its Pre-Qualification Questionnaire suite of documents available through the Trust's eTendering system (see section VI.3 for further information).

III.2.2) Economic and financial ability

Information and formalities necessary for evaluating if the requirements are met:

In accordance with Article 47 of Directive 2004/18/EC and Regulation 24 of the Public Contracts Regulations 2006 (as amended). The Trust has also set out such information within its Pre-Qualification Questionnaire suite of documents available through the Trust's eTendering system (see section VI.3 for further information).

Minimum level(s) of standards possibly required: (if applicable)

See the Pre-Qualification Questionnaire suite of documents for further information.

III.2.3) Technical capacity

Information and formalities necessary for evaluating if the requirements are met:

In accordance with Articles 48 to 50 of Directive 2004/18/EC and Regulation 25 of the Public Contracts Regulations 2006 (as amended). The Trust has also set out such information within its Pre-Qualification Questionnaire suite of documents available through the Trust's eTendering system (see section VI.3 for further information).

Minimum level(s) of standards possibly required: (if applicable)

See the Pre-Qualification Questionnaire suite of documents for further information.

III.2.4) Information about reserved contracts (if applicable)

☐ The contract is restricted to sheltered workshops

☐ The execution of the contract is restricted to the framework of sheltered employment programmes

III.3) Conditions specific to services contracts

III.3.1) Information about a particular profession

(if yes) Reference to the relevant law, regulation or administrative provision:

III.3.2) Legal persons should indicate the names and professional qualifications of the staff responsible for the execution of the service

Section IV: Procedure

IV.1) Type of procedure

IV.1.1) Type of procedure

☒ Competitive dialogue

Justification for the choice of accelerated procedure:

Some candidates have already been selected (if appropriate under certain types of negotiated procedures)

(if yes, provide names and addresses of economic operators already selected under Section VI.3 Additional information)

Justification for the choice of accelerated procedure:

IV.1.2) Limitations on the number of operators who will be invited to tender or to participate (restricted and negotiated procedures, competitive dialogue)

Envisaged number of operators

3

or Envisaged minimum number

and (if applicable) maximum number

Objective criteria for choosing the limited number of candidates:

The Trust has set out such information within its Pre-Qualification Questionnaire suite of documents available through the Trust's online bid management portal, BravoSolutions (see section VI.3 for further information).

IV.1.3) Reduction of the number of operators during the negotiation or dialogue (negotiated procedure, competitive dialogue)

Recourse to staged procedure to gradually reduce the number of solutions to be discussed or tenders to be negotiated

☒ yes

IV.2) Award criteria

IV.2.1) Award criteria (please tick the relevant box(es))

☒ The most economically advantageous tender in terms of

☒ the criteria stated in the specifications, in the invitation to tender or to negotiate or in the descriptive document

	Criteria	Weighting

IV.2.2) An electronic auction will be used

☐ no

(if yes, if appropriate) Additional information about electronic auction:

IV.3) Administrative information

IV.3.1) File reference number attributed by the contracting authority: (if applicable)

IV.3.2) Previous publication(s) concerning the same contract

☐ yes

if yes

☐ Prior information notice

Notice number in the OJEU:

2014/S 034-055603

of (dd/mm/yyyy)

18/02/2014

Other previous publications (if applicable)

☐ no

Notice number in the OJEU:

of (dd/mm/yyyy)

Notice number in the OJEU:

of (dd/mm/yyyy)

IV.3.3) Conditions for obtaining specifications and additional documents or descriptive document in the case of a competitive dialogue

Time limit for receipt of requests for documents or for accessing documents

Date (dd/mm/yyyy):

Time

Payable documents

(if yes, give figures only) Price:

Currency

Terms and method of payment:

IV.3.4) Time limit for receipt of tenders or requests to participate

Date (dd/mm/yyyy):

15/08/2014

Time:

12:00

IV.3.5) Date of dispatch of invitations to tender or to participate to selected candidates (if known, in the case of restricted and negotiated procedures, and competitive dialogue)

Language(s) in which tenders may be drawn up

ES	CS	DA	DE	ET	EL	EN	FR	IT	LV	LT	HU	MT	NL	PL	PT	SK	SL	FI	SV	BG	GA	RO
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

IV.3.7) Minimum time frame during which the tenderer must maintain the tender

until: (dd/mm/yyyy)

or Duration in months:

or in days (from the date stated for receipt of tender):

IV.3.8) Conditions for opening tenders

Date (dd/mm/yyyy):

Time:

Official name

National ID

For the attention of

Postal address

Town

Postal code

Country

(if applicable) Place:

Persons authorised to be present at the opening of tenders (if applicable)

List of person

Section VI: Complementary information

VI.1) This is a recurrent procurement (if applicable)

☐ no

(if yes) Estimated timing for further notices to be published:

VI.2) The contract is related to a project and/or programme financed by European Union funds

☐ no

(if yes) Reference to project(s) and/or programme(s):

VI.3) Additional information: (if applicable)

Suppliers Instructions How to Express Interest in this Tender~: 1. Register your company on the eSourcing portal (this is only required once) - Browse to the eSourcing Portal: <https://www.nhssourcing.co.uk> and click the link to register - Accept the terms and conditions and click 'continue' - Enter your correct business and user details - Note the username you chose and click 'Save' when complete - You will shortly receive an email with your unique password (please keep this secure) 2. Express an Interest in the tender - Login to the portal with the username/password -

Click the 'PQQs / ITTs Open To All Suppliers' link. (These are Pre-Qualification Questionnaires or Invitations to Tender open to any registered supplier) - Click on the relevant PQQ/ ITT to access the content. - Click the 'Express Interest' button at the top of the page. - This will move the PQQ /ITT into your 'My PQQs/ My ITTs' page. (This is a secure area reserved for your projects only) -You can now access any attachments by clicking 'Buyer Attachments' in the 'PQQ/ ITT Details' box 3. Responding to the tender - Click 'My Response' under 'PQQ/ ITT Details', you can choose to 'Create Response' or to 'Decline to Respond' (please give a reason if declining) - You can now use the 'Messages' function to communicate with the buyer and seek any clarification - Note the deadline for completion, then follow the onscreen instructions to complete the PQQ/ ITT - There may be a mixture of online & offline actions for you to perform (there is detailed online help available) You must then submit your reply using the 'Submit Response' button at the top of the page. If you require any further assistance please consult the online help, or contact the eTendering help desk.

The Trust reserves the right to not award any or part of this contract.

All dates, values and time periods specified in this notice are only provisional and the Trust reserves the right to change these.

The Trust shall not be responsible for any costs, charges or expenses incurred by candidates or tenderers and accepts no liability for any costs, charges or expenses, irrespective of the outcome of the competition, or if the competition is cancelled or postponed.

Candidates are advised that the Trust is subject to the Freedom of Information Act 2000 (the 'Act'). If a candidate considers that any of the information supplied as part of this procurement procedure should not be disclosed because of its commercial sensitivity, confidentiality or otherwise, they must, when providing this information, clearly identify the specific information they do not wish to be disclosed and clearly specify the reasons for its sensitivity. The Trust shall take such statements into consideration in the event that it receives a request pursuant to the Act which relates to the information provided by the interested party. Please note, it is not sufficient to include a statement of confidentiality encompassing all the information provided in the response.

Section I.1 - Further information and the Trust's Pre-Qualification Questionnaire (PQQ), the method by which all expressions of interest must be submitted, and Memorandum of Information (MoI) which provides information about the Trust, its Commissioners and the Midland Metropolitan Hospital Project, can be obtained through the Trust's eTendering system (see registration instructions above).

Section II.1.6 - The list of CPV codes is not exhaustive.

Section II.1.9 - Please note that variant bids may be accepted by the Trust provided that their form and nature are approved by the Trust in advance.

Section II.3 - Subject to Government approval, the Trust anticipates entering into a contract with the successful contractor for a period of 30 years (from the services commencement date) in relation to the Facilities. However, the precise duration of the services contract will be discussed during the competitive dialogue with Bidders and may be shorter or longer depending on value for money assessment, market conditions or other factors that may affect the contract period. For the avoidance of

doubt, a 360 month services duration is indicative only and is not intended to specify the maximum or minimum length of the contract. In this regard it is envisaged that the construction works for the Facilities will commence in April 2016.

Section III.1.2 – The Trust has undertaken a value for money assessment which has demonstrated that at present PF2 provides a value for money option to deliver the contracting authority's requirements. Financial payments will be made as outlined through the terms defined in the contract documentation.

Section IV.3.3 – The Trust has made available a Memorandum of Information (MoI) and a PQQ. The MoI provides further information about the Trust, its Commissioners and the Midland Metropolitan Hospital Project. Completion and return of the PQQ is the only method by which the Trust will accept requests to participate. Both the PQQ and MoI can be obtained through the Trust's eTendering system.

Section IV.3.4: Requests to participate must be made by submitting a fully completed Pre-Qualification Questionnaire (PQQ) by the date and time specified in Section IV.3.4. Please refer to the PQQ for the Trust's detailed instructions on PQQ submission requirements.

Section IV.3.5 – It is expected that the Trust will use the eTendering system throughout the competitive dialogue process. It is anticipated that the Trust's ITPD and core procurement documents will be made available to shortlisted Bidders on approximately 5 September 2014.

VI.4) Procedures for appeal

VI.4.1) Body responsible for appeal procedures

Official name		National ID	
Postal address			
Town	Postal code	Country	
E-mail	Telephone		
Internet address: (URL)	Fax		

Body responsible for mediation procedures (if applicable)

Official name	National ID	
Postal address		
Town	Postal code	Country
E-mail	Telephone	
Internet address: (URL)	Fax	

VI.4.2) Lodging of appeals (please fill in heading VI.4.2 or if need be, heading VI.4.3)

Precise information on deadline(s) for lodging appeals:

In accordance with the Public Contracts Regulations 2006 (as amended)

VI.4.3) Service from which information about the lodging of appeals may be obtained

Official name	National ID	
Postal address		
Town	Postal code	Country
E-mail	Telephone	
Internet address: (URL)	Fax	

VI.5) Date of dispatch of this notice (dd/mm/yyyy):
14/07/2014

Annex A

Additional addresses and contact points

APPENDIX 11c – BIDDER CONSTITUTIONS

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case

Section A Details of the Consortium

A5(a)

Provide an organisation chart showing internal relationships between the Consortium and Member and Relevant Organisations. State whether membership, roles and responsibilities will change during the PF2 procurement, design, construction and operational phases of the Project.

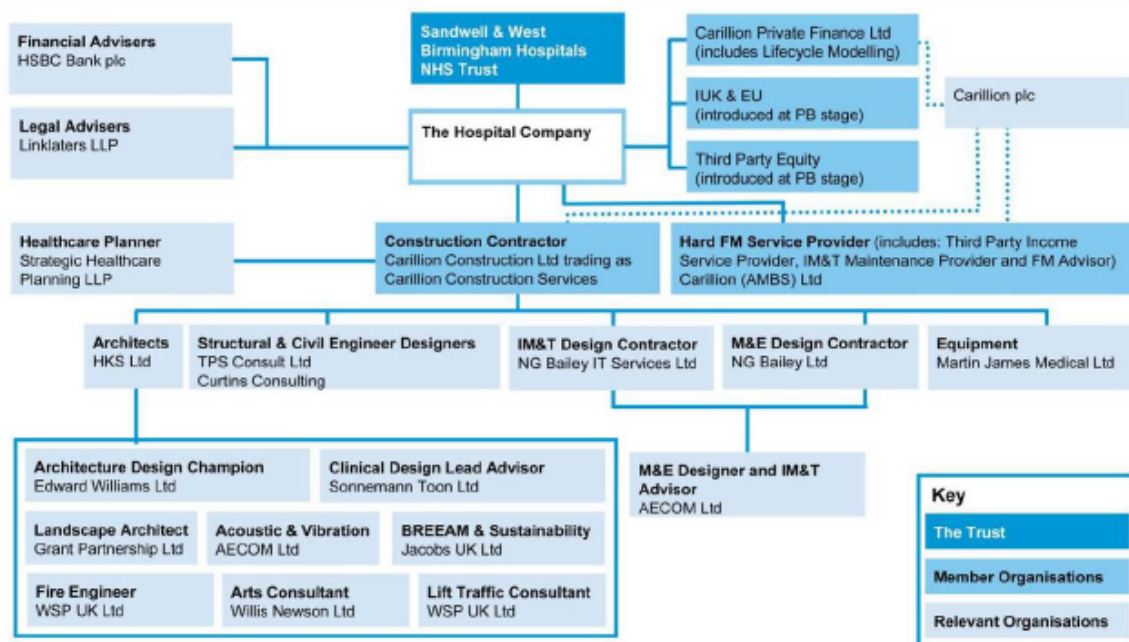
Consortium Structure

The Consortium is led by and structured around Carillion with Carillion companies as the Member Organisations in the roles of principal Shareholder and Investor, Construction Contractor and FM Service Provider.

The organisation charts and relationships are in three distinct phases:

1. Bid Stage from PQQ through to Financial Close (if successful)
2. Financial Close through to completion of Construction
3. Operational stage to end of Concession

1. Bid Stage from PQQ through to Financial Close (if successful)



Just prior to Financial Close the Project Company "The Hospital Company (MMH) Ltd" would be incorporated including IUK EU and a 3rd Party as shareholders alongside Carillion Private Finance Limited following the equity funding competition held during the preferred bidder stage.

APPENDIX 11d – INVITATION TO SUBMIT FINAL BID VOLUME 4

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project

Invitation to Submit Final Bids
Volume Four

Procurement Process

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Disclaimer

This document has been prepared for use by Sandwell and West Birmingham Hospitals NHS Trust (SWBH) in connection with the titled project or named part thereof and should not be relied upon by any other person or used for any other project without an independent check being carried out as to its suitability and prior written authority of SWBH being obtained. Neither SWBH nor its advisors accept any responsibility or liability in connection with this document being used by any other person or being used for any other purpose other than the purpose for which it was commissioned nor do they accept any duty of care to any other person in connection therewith. Any person using or relying on this document for any other purpose agrees, and will by such use or reliance be taken to confirm his agreement, to hold SWBH and its advisors harmless from any and all losses and/or damages resulting there from.

1 Introduction

1.1.1 Volume One of the Invitation to Submit Final Bids (ITFB) outlines the structure and content of the four volumes of the ITFB. This is the fourth volume which focuses on the procurement process. ITFB Volume 4 sets out:

- The approach to Dialogue
- The procurement timetable and process
- The approach to the Funding Competitions
- The Bid Deliverables and evaluation process
- The approach to Variant Bids
- Project management and administrative processes

1.1.2 A list of appendices is presented at Section 7.

2 Competitive Dialogue (CD) Strategy

2.1 Underpinning Regulations

- 2.1.1 The Trust is procuring the Midland Metropolitan Hospital (**MMH**) through the Government's new approach to the delivery of private finance into public infrastructure and services, Private Finance 2 (**PF2**) route.
- 2.1.2 The procurement is following the Competitive Dialogue procedure under Article 29 of directive 2004/18/EC (the Directive) and Regulation 18 of the Public Contracts Regulations 2006 (SI 2006/5) (as amended).
- 2.1.3 The purpose of this ITFB is to follow on from the initial ITPD issued in September 2014 and explores how the Trust will close the Dialogue; it explains the process which the Trust intends to follow, the requirements of Bidders (in terms of Bid Deliverables) and the Trust's approach to the evaluation of Bids.
- 2.1.4 The rules of CD require that Final Bids shall contain all the elements required and necessary for the performance of the project. Bids may be clarified, specified and fine-tuned at the request of the Trust up to the point where a Preferred Bidder can be identified. However, such clarification, specification, fine tuning or additional information may not involve changes to basic features of the bid and / or distort competition or have a discriminatory effect. Once a Preferred Bidder has been identified, the Trust is permitted to "clarify aspects of that tender or confirm commitments contained" in it. Again, such clarification and confirmation may not have the effect of modifying substantial aspects of the tender and should not risk distorting the competition or causing discrimination. In each case therefore, the Trust will undertake this process with care to ensure that the requirements of the rules are observed.
- 2.1.5 This means that a high level of detail is required such that price and commercial certainty has been achieved prior to Closure of Dialogue.
- 2.1.6 The Trust has evaluated Draft Final Bids and has received authorisation of its draft Appointment Business Case and is content that it is ready to close Dialogue.
- 2.1.7 **Dialogue is now closed.**

2.2 Summary of Trust Approach

- 2.2.1 The Dialogue process was expected to follow a 3:2:1 pattern.
- 2.2.2 The Trust issued an ITPD to three Bidders on 5th September 2014. One Bidder withdrew immediately. A second Bidder did not fully engage with the Trust during the CD3 Dialogue stage and did not submit a Bid in December 2014.
- 2.2.3 The Trust, subject to agreement of certain criteria which this ITFB makes clear, continued the Dialogue with one Bidder. There were some structural changes required to the programme and deliverables announced in the ITPD in September 2014 to support this. These changes were necessary in order to provide an alternative mechanism to assure value for money (VFM) than the usual competitive pressure which would be present throughout CD4 and CD5. The additional requirements are detailed in section 2.3.
- 2.2.4 The aim was to make the Dialogue process as structured and transparent as possible to achieve the best outcome for the Trust without incurring unnecessary bid costs (see section 2.4). The process was controlled by the Core Project Team (membership presented in ITFB Volume 1) to retain an overview of all issues and ensure consistency of approach.

- 2.2.5 The draft Project Agreement is based on Department of Health (DH) Standard Form (Version 3, as amended July 2004, February 2006, November 2006) ('DHSF') and has been tailored to reflect SOPC4 amendments, HM Treasury's Standardisation of PF2 Contracts which was issued in December 2012 and the specific elements of this project. It has been prepared with comprehensive bespoke drafting to reflect the Trust's commercial position as outlined in ITFB Volume Three. The Trust has updated this to include amendments agreed with the Bidder during CD stage 3 and 4 and that update is included with this ITFB. There is an agreed list of outstanding minor clarification issues to be resolved at Preferred Bidder stage. The Bidder is not permitted to raise new issues at this stage.
- 2.2.6 Delivery of the Project under PF2 means that two separate Funding Competitions will be required. The first will be used to identify the Equity Provider and the second will be used to appoint the Senior Debt Provider. In each case these competitions are mandatory. The Equity Funding competition is expected to be completed prior to appointment of Preferred Bidder. The Debt funding competition will be completed at the Preferred Bidder stage, with some prior market sounding. The appointment of due diligence advisors is complete and reports on Draft Final Bids have been received. Further details in relation to the proposed timing and structure of the Funding Competitions are included at section 4 of this document.
- 2.2.7 In September 2014 the Trust issued a comprehensive clinical and technical brief. As a result of Dialogue the Trust has updated that brief and an amended ITFB2 is now issued as part of this ITFB. The Trust gives the Design Vision values (summarised in **Appendix 1** of ITFB Volume 1) high priority and has focused on these principles at each stage.
- 2.2.8 The Bidder has already developed a design which responds to the Trust's brief. They will continue the development of their solution until their design is fully worked up and cost, commercial and risk certainty has been achieved. Prior to this, and to test readiness to Close Dialogue, the Bidder was required to submit a Draft Final Bid. A full evaluation of the Draft Final Bid was undertaken in accordance with the evaluation process set out in Section 5 to facilitate approval for Closure of Dialogue.
- 2.2.9 The Trust determined that it would only Close Dialogue if the Draft Final Bid included all the elements required and necessary for the performance of the Project and it was satisfied that all material issues relating to the Bidder's solution, in particular those impacting on price and risk, had been scoped and agreed. The Bid needed to comply with the Trusts Cost and Quality hurdles and all Red rated RAG issues from Dialogue sessions need to have been resolved. Each of these requirements has now been satisfied.
- 2.2.10 Approval from DH was required before the Trust was able to close Dialogue. DH required the Trust to produce and get approval for an Appointment Business case from NHSTDA (or Monitor), DH and HMT before granting permission to close Dialogue. No changes to the basic features of the Bid involving changes to cost or which would otherwise potentially distort competition or result in discrimination will be permitted following Closure of Dialogue. DH has now authorised the Trust to close dialogue.
- 2.2.11 The Trust will evaluate the Final Bid on the basis of their response to the Bid Deliverables as set out in this ITFB4. The Trust has provided guidance on what the Evaluation Teams will be considering in their evaluation.
- 2.2.12 The Trust reserves the right to vary the procurement procedure to support continued competition, avoid unnecessary Bid costs and adhere to subsequent technical or legal guidance. In addition, the Trust reserves its right to re-open the Dialogue at any stage should it deem it necessary.
- 2.2.13 Formal approvals will be required at key stages to enable progression of the Project. The Bidder will need to ensure that they comply with the requirements at each stage. Detail of the approval process at each stage is presented in Section 3.

- 2.2.14 DH and HMT's support for the Trust's continuation of the procurement is contingent on the bidder continuing to meet the requirements of this ITFB, in particular the single bidder criteria set out in 2.3 below.

2.3 Single Bidder Criteria

- 2.3.1 The Bidder agrees that they will not exceed the SPV, capex, lifecycle cost and Hard FM costs within their Interim Submission at the next stage unless specifically agreed with the Trust and their cost advisors. The costs in the base bid at Interim Submission were :

	£'m
Capital Expenditure	298.6
Lifecycle	47.839 (real)_
Hard FM	87.163 (real)
SPV	7.841

- 2.3.2 The Bidder agrees that the Interim Submission Cost Plan figures for Preliminaries, Overheads and Profit, Contingency / Risk and Design Fees will be fixed as 'not to be exceeded' values or percentages for the remainder of the procurement. (The values or percentages may be reduced at CD stage 4 but not increased). Inflation will be compared to and should not exceed the BCIS tender price index at the time of submission.
- 2.3.3 The Bidder agrees to 'Cost Check' submissions at two-monthly intervals during the CD4 period with a requirement for the bidder to report updated costs against the agreed elemental Cost Plan, with an explanation in each report of any variances from that Cost Plan. These "Cost Check" submissions will be subject to formal review by the Trusts cost advisors.
- 2.3.4 The Bidder has provided (Appendix 6) a profile of the construction spend and proposed what percentage of that spend will be market tested, tendered, benchmarked or otherwise competitively price checked by final bids. The definitions of each kind of competition are included in that schedule. The Bidder agrees to provide evidence that at least the percentage of the net construction cost detailed in Appendix 6 will be market tested / tendered according to the definitions detailed in appendix 6 prior to final submission and that the most economically advantageous tender will transparently form the basis for the relevant section of the elemental cost plan submitted at Final Bids. It will be acceptable to increase the percentage of a higher order of competitive check e.g. full market test at the expense of a reduction of a lower order e.g. benchmarking but not vice versa. The Trust has added a Bid Deliverable to require this information at Final Bids and it will be evaluated as a pass / fail criteria.
- 2.3.5 The Bidder shall provide information at each "Cost Check" point to demonstrate value for money of the MMH capital, lifecycle and hard FM costs against those for the Royal Liverpool Hospital. This information will be subject to detailed review and challenge by the Trust's cost advisors. The Bidder agrees that the FM non pay costs (adjusted for inflation) per m2 shall not exceed those agreed for the Royal Liverpool Hospital. The Bidder agrees that, as an upper limit, the lifecycle costs per m2 (adjusted for inflation) shall not exceed those at Royal Liverpool Hospital.
- 2.3.6 The Bidder agrees to resolve all Red Issues from the interim submission (included at appendix 10) and all subsequent boot camps during CD stage 4 to the Trusts satisfaction before the Final Bid submission.

2.3.7 The Trust and Bidder agree to address Red Issues arising from evaluation of interim submission at an early stage in CD4.

2.3.8 The Trust will expect the quality score for the solution achieved during evaluation at Draft Final and Final Bid stage to equal or exceed the quality score achieved at Interim Submission. If this is not the case at Draft Final Bid stage the Trust will provide detailed feedback and will expect the Bidder to improve the Bid to meet the target by Final Bids.

2.3.9 The Trust will generate a new metric of cost (npv of UP) per benefit point from the Bidders interim submission and will expect this to reduce at draft final bids in each quality category.

Category	Weighted Score at Interim Submission	NPV of UP £m	Cost per point £m
Design Vision	75.00	308.9	4.12
Estates & Technical	58.75	308.9	5.26
Clinical	70.01	308.9	4.41
Legal & Commercial	70.02	308.9	4.41
Financial	80.02	308.9	3.86
Facilities Management	68.82	308.9	4.48
Project Management	79.15	308.9	3.90
Regeneration	91.60	308.9	3.41

2.3.10 The Bidder should note that the monetary and quality hurdle requirements detailed in section 5 will be strictly applied.

2.3.11 The Trust has amended the programme included in this ITFB. By accepting this ITFB the Bidder is deemed to accept the programme and, to the best of its ability, commits to delivering it.

2.4 Reimbursement of Bid Costs

2.4.1 The Trust designed and ultimately managed the Dialogue process to be conducted in a structured and efficient manner consistent with the achievement of the necessary commercial certainty so that the costs incurred by the Bidder and the Trust were proportionate to the project objectives.

2.4.2 The Trust's objective was therefore to ensure that the 'at risk' costs of bidding this scheme were no greater than they needed to be for a scheme of this size and nature (in terms of service provision). The development of the scheme to date has been designed to achieve that objective and, in meeting its obligations under PF2, the Trust has structured the procurement phase so that it was no longer than 18 months from the issue of the contract notice to the appointment of a Preferred Bidder. The Indicative Timetable in Section 3.1 below demonstrates this.

- 2.4.3 The risk to the Bidder of not being appointed Preferred Bidder is clearly less under a single bidder scenario. However the Trust is concerned that the Final Bid needs to represent a value for money solution.
- 2.4.4 The Trust expects the Final Bid to include all the elements required and necessary for the performance of the Project and to be satisfied that all material issues relating to the Bidder's solution, in particular those impacting on price and risk, have been scoped and agreed. The Bid needs to comply with the Trusts Cost and Quality hurdles (including the maintenance or increase of the quality score described in 2.3.9). All Red rated RAG issues from Dialogue sessions need to have been resolved.
- 2.4.5 If the Final Bid does not deliver against the following key criteria then the Trust would not appoint the Bidder as Preferred Bidder and in these circumstances Bid Costs are entirely at the Bidders own risk.
- UP / NPV of UP over life of contract is within Financial Hurdle
 - No remaining Red issues
 - No scores of 1 (unacceptable) or 2 (poor)
 - Cost per benefit point has increased overall and at least been maintained in each evaluation section since Interim Submission.
- 2.4.6 The Trust intends to keep the issue of bid costs under review as its procurement proceeds. If the commitments entered into in this ITFB are not fulfilled by the public sector the Trust would consider the payment of excess Bid Costs.
- 2.4.7 When forming a judgment, the Trust will be informed by PFU's recommendation.
- 2.4.8 The Trust reserve the right to carry out due diligence to confirm the amount of any costs incurred by the Bidder should it be minded to make any contribution towards bid costs.
- 2.4.9 The Trust and Bidder will agree to monitor key hold/ decision points at which further financial commitment is needed to deliver the programme to inform the decision to proceed to each stage.

3 Procurement Timetable and Process

3.1 Indicative Timetable

- 3.1.1 The key stages and milestones of the procurement are set out in Table 1 below. Whilst the Trust does not intend to depart from the indicative timetable it reserves the right to do so at any stage.

Table 1 Indicative Procurement Phase Timetable

Procurement Milestones	Date
OJEU	14 th July 2014
Prequalification Stage Selection of 3 Bidders and one reserve	4 th September 2014
ITPD Issued	5 th September 2014
CD Stage 1: ITPD Clarification Induction activities	8 th September to 19 th September 2014
CD Stage2/ 3: Dialogue to Interim Submissions Interim submissions Appointment of Single Bidder	12 th December 2014 10 th March 2015
CD Stage 4: Dialogue with Single Bidder Submission of Draft Final Bid Closure of Dialogue	2 nd April 2015 17 th July 2015
CD Stage 5: Final Bid Final Bid submitted Appointment Preferred Bidder	17 th July 2015 5 th August 2015
Preferred Bidder to Financial Close Financial Close	9 th December 2015
Construction Handover Hospital Opening	13 th July 2018 8 th October 2018

- 3.1.2 A detailed project plan is presented in **Appendix 1**. The Trust reserves the right to vary the plan to support continued competition, avoid unnecessary Bid costs or adhere to subsequent technical or legal guidance.

3.2 Status Following CD3

- 3.2.1 The Trust invited the following three Bidders to participate in the Dialogue stage of the CD process: Balfour Beatty Investments, Carillion (The Hospital Company), Laing O'Rourke / Interserve (Momentum Healthcare). Balfour Beatty Investments declined to accept the ITPD. Laing O'Rourke / Interserve commenced Dialogue but did not engage fully and did not make an Interim Submission in December 2014. The Trust, subject to certain amendments and criteria made clear in this ITFB, continued the Dialogue with The Hospital Company.

3.3 Document Publication

- 3.3.1 The ITPD documents have been published the Trust website www.swbhbh.nhs.uk/about-us/new-hospital in line with transparency guidance.

3.4 CD Stage Structure

- 3.4.1 The Dialogue programme has been divided into five stages in accordance with the DH Design Development Protocol for PFI schemes. The project has completed stages 1 to 3. The aims and approach proposed for the remaining stages are outlined in the following sections.
- 3.4.2 A proposed timetable for Dialogue sessions is presented at **Appendix 2**.
- 3.4.3 The Trust believes that the proposed schedule of meetings provided adequate opportunities to develop the Bid to the level required.
- 3.4.4 The Trust used the core principles of lean procurement. Dialogue sessions were conducted as “boot camps” where there were multiple strands of Dialogue taking place in parallel, each with clear objectives to achieve before they were able to conclude. Each work stream maintained RAG rated issues lists throughout the course of the dialogue.
- 3.4.5 A final boot camp took place before submission of the Draft Final Bid to ensure all red issues raised during Dialogue are resolved.
- 3.4.6 Contemporaneous action/decision logs were added to the issues lists during each Dialogue session and agreed by the participants before the close so that they could be circulated immediately.
- 3.4.7 Key members of the Core Project Team were available for all Dialogue sessions (together with the necessary advisors / users).
- 3.4.8 Regular Bid Management Meetings for the Bid team to review progress with the Trust were arranged as presented in the proposed timetable for Bidder meetings at **Appendix 2**.
- 3.4.9 Bidders recorded the outcome of their Bid Management Meeting in notes agreed by the Trust.

3.5 CD Stage 4: Dialogue with One Bidder

Complete

3.6 CD Stage 5: Final Bids

Aims

- 3.6.1 The aims of CD Stage 5 are for:
- The Bidder to submit a Final Bid
 - The Trust to evaluate the Final Bid
 - The Due Diligence Advisors to review the changes from Draft Final Bids and comment on any effect on their report
 - The Trust to update the Appointment Business Case (ABC)
 - The Trust to coordinate approvals leading to approval of the Preferred Bidder

Invitation to Submit Final Bids

- 3.6.2 The Trust is issuing this Invitation to Submit Final Bids (ITFB) to the Bidder at Closure of Dialogue.
- 3.6.3 The ITFB specifies:
- Confirmation of changes to requirements set out in the ITPD which have arisen from the Dialogue process
 - Reference to previous amendments or addenda which recorded these changes throughout the process
 - The detailed content required for the Final Bid
 - The deadline for submission of the Final Bid
 - Any specific terms agreed with the Bidder during the CD process
- 3.6.4 The Bidder must submit a Final Bid based on the solution identified and agreed prior to the Closure of Dialogue. No new issues, offers or suggestions that were not discussed and agreed as part of the Dialogue should be included in the Final Bid.
- 3.6.5 The Trust has discussed and resolved all commercial and price sensitive issues before Closure of Dialogue. The Project Agreement will therefore be agreed in respect of this position with only minimal non price sensitive issues left to be addressed at Final Bid. Any new issues raised or previously withdrawn points re-raised at Final Bid stage will render the Bid non-compliant.
- 3.6.6 Only items that have changed since the Draft Final Bid will be submitted by the Bidder when submitting their Final Bid. A schedule of items submitted as part of the Draft Final Bid and that remain unchanged must also be submitted for completeness.

Evaluation and Selection of Bidder the Trust is Minded to Appoint

- 3.6.7 The Core Project Team will first check bid compliance as described in section 5.3.
- 3.6.8 Evaluation of items that have changed since the Draft Final Bid will then be undertaken as described in section 5.4 and Core Project Team will produce an Evaluation Report.
- 3.6.9 The Core Project Team will also consider whether there is any potential for changes to items submitted at Final Bid to impact on the Draft Final Bid previously issued. The Bidder is reminded that at this stage the Trust is only permitted to “clarify, specify and fine tune” Bidder Submissions.
- 3.6.10 The Evaluation Report will confirm (or otherwise) that the Bidder should be appointed as Preferred Bidder by application of the evaluation criteria identified in section 5.5. The report will be considered by the Trust Board to confirm the provisional appointment subject to approval of the ABC.
- 3.6.11 The Trust will inform the Bidder of the outcome of its Final Bid evaluation.
- 3.6.12 A review of the due diligence report will be commissioned after the Trust after receipt of the Final Bid. This report will review any risks that have arisen since the full review conducted at Draft Final Bid stage. It also informs the Funding Competition.

Planning Permission

- 3.6.13 The Trust will expect the Bidder to complete preparation for the planning application after Closure of Dialogue. The full planning application will be launched in advance of appointment of Preferred Bidder.

ABC Approval

- 3.6.14 The final ABC will need to be approved by the Department of Health before appointment of the Preferred Bidder.
- 3.6.15 The Preferred Bidder letter will be approved by the Department of Health for issue with the approval. This letter will refer to the ABC as documentation of the conditions of appointment.

Due Diligence Advisors

- 3.6.16 The due diligence advisors will be novated to the Preferred Bidder following approval of the ABC to enable preparation for the Funding Competition.

3.7 Preferred Bidder to Financial Close

- 3.7.1 Following the appointment of the Preferred Bidder the Trust may 'clarify' aspects of the Preferred Bidder's bid or confirm commitments, provided that there are no material changes to any aspect of the Final Tender; in particular that there are no changes that impact on price, commercial position and risk and provided that this does not have the potential to distort the competition or risk causing discrimination.
- 3.7.2 The Preferred Bidder should therefore recognise that the scope to make any changes to its bid subsequent to both submission of its Final Bid and Preferred Bidder appointment will be extremely limited.
- 3.7.3 The Trust expects that the remaining non price sensitive 1:50 plans and other design data will be completed during this period.

Planning

- 3.7.4 The planning process will continue to be taken forward with Sandwell Metropolitan Borough Council at this stage.
- 3.7.5 The Preferred Bidder will take responsibility for amendments with cost implications arising from changes due to planning requirements which are identified at this stage.
- 3.7.6 Full Planning Approval and expiry of the judicial review period (6 weeks) will be completed prior to Financial Close.

Funding Competitions

- 3.7.7 The Preferred Bidder will run a Senior Debt Funding Competition as outlined in Section 4 below. The Trust will confirm the selection of the winning Funder(s).
- 3.7.8 Due diligence advisor appointments will then be novated to the selected senior debt funder(s).
- 3.7.9 The Funder(s) will then prepare for financial close completing the work required to implement funding arrangements within agreed time and price thresholds.

Confirmatory Business Case

- 3.7.10 The Trust will work with the Private Finance Unit and Department of Health to ensure management of any potential problems impacting on the position achieved by the ABC.

3.7.11 A Confirmatory Business Case (CBC) will be agreed before Financial Close to confirm to the Department of Health and the Treasury that the parameters of the ABC have not been breached.

3.7.12 Formal submission of the CBC will be made after:

- Expiry of the judicial review period following planning approval
- Completion of the Funding competitions

Standstill Period: Alcatel

3.7.13 The standstill period is considered unnecessary in a single bidder procurement.

4 Approach to Funding Competitions

- 4.1.1 The Trust expects that the legal and insurance advisors to the providers of equity within the consortium will provide due diligence to potential third party equity funders and HMT / IUK. An amendment has been made to the contract with the due diligence technical advisor to senior debt so that the equity providers may rely on their advice.
- 4.1.2 Due diligence for senior debt providers is expected to be provided by independent third parties.
- 4.1.3 Historically, funders have commissioned due diligence for senior debt funders following the appointment of the Preferred Bidder. This has often resulted in the re-opening of commercial terms, something that is inconsistent with both the legal requirements of CD and the ABC process. In order to provide potential participants in a senior debt Funding Competition with an appropriate level of understanding of the Project and to limit any re-opening of commercial points, the Trust has adopted a strategy which requires the participation of shortlisted Bidders in the appointment of due diligence advisors.
- 4.1.4 This competition was commenced in CD stage 3 but due to the uncertainty with Bidder B was delayed. It was completed in CD stage 4.
- 4.1.5 This section outlines the approach to the Funding Competitions and the due diligence process that will take place at key stages before submission of the ABC. It will be a condition of the Funding Competitions that Funders agree to be bound by the Project Agreement approved in the ABC.
- 4.1.6 An expected timeline can be found at Appendix 9.

Senior Debt Funding Competition

- 4.1.7 The following approach will apply:
- Bidder agreement to the funding protocol. Roles of the participants and engagement in the appointment of due diligence advisors will take place as part of Stage 4 of the Dialogue. The funding protocol is presented at Appendix 5.
 - Due diligence advisors (legal, technical and insurance) will be appointed by the Trust (acting in an administrative capacity only and as trustee of the due diligence advisor duty of care to the ultimate funder) in consultation with the Bidders during the first months of the CD process. Bidders involvement will include:
 - Contribution to list of firms and specific individuals within these firms invited to tender for due diligence services
 - Agreement to the scope of services and terms of appointment
 - Participation in the evaluation of tender responses, interviews and contract award.
 - Payment to the due diligence advisors will be made by Project Co following Financial Close
 - A First Stage Due Diligence report based upon the ITPD documentation and Interim Submission will be commissioned as soon as possible.
 - At the Draft Final Bid stage, a full due diligence report will be commissioned
 - The full due diligence report will be reviewed for any changes from Draft Final Bids after Final Bids are received. The final report will inform the Funding Competition.
 - The due diligence advisor appointments will be novated to the Preferred Bidder after the Preferred Bidder has been appointed at ABC approval

- The Preferred Bidder will run a Funding Competition for the senior debt element of the Project. This will be undertaken on an open book basis, and overseen by the Trust and the PFU.
- The Preferred Bidder will select and recommend the winning funder(s) with the most economically advantageous tender. The Trust will confirm the selection of the winning funder(s).
- The due diligence advisor appointments will be novated to the selected funder(s) and they will continue their work up to Financial Close and beyond.

Equity Funding Competition (EFC)

- 4.1.8 The Trust will discuss with PFU / IUK the merits of an accelerated approach to the Equity Funding competition. The approach to the Equity Funding Competition is described below-
- **Pre-qualification commitment:** As part of pre-qualification, Bidders were asked to confirm that should they be appointed as Preferred Bidder they are willing to run and underwrite an Equity Funding Competition. This confirmation included a commitment that the PB will follow the guidance published by HM Treasury on PF2 equity;
 - **Underwriting:** The competition will be for a long term investor(s) to hold a significant minority stake in the equity of Project Co (alongside the Infrastructure UK Equity Unit "IUK EU"). The Preferred Bidder will be expected to meet the full risk capital requirement of Project Co in the event that IUK chooses not to invest and/or the Equity Funding Competition does not achieve the best VfM outcome. No less than 25% of the risk capital in Project Co will be available for the Equity Funding Competition (with up to 10% being available to IUK EU).
 - **During Stage 4 of the Dialogue:** Bidders will be invited to propose a list of candidates they are minded to approach to take part in the Equity Funding Competition. Through the Equity Funding Competition, the Government is looking to encourage direct investment by long-term infrastructure investors and the Preferred Bidder should thoroughly investigate such candidates.
 - A discussion on the merits of potential candidates will take place as part of the dialogue process. Candidates will be reviewed on quantitative and qualitative measures. The Equity Funding Competition is mandatory but it is not part of the scoring of bids.
 - **The selection process:** A two stage process will be run by the Preferred Bidder without a prior and separate pre-qualification stage. The selection of the winning candidate will be a decision for the Preferred Bidder based upon the outcome of its evaluation of the candidates. The Trust and IUK will work with the Preferred Bidder to ensure the length and cost of the process is commensurate with a VfM outcome. IUK EU believes that prospective third party investors will be willing to accept the Equity Due Diligence Arrangements as the basis for their investment appraisal but a separate information memorandum will be a requirement of running an Equity Funding Competition
 - The Equity Funding Competition process will be analogous to the Senior Debt Funding Competition described above. The selection of the winning candidate for the Equity Funding Competition will be based upon the outcome of a well documented and thorough bid evaluation process. The Trust and IUK EU will require open-book sharing of the results of the review process, the evaluation criteria and selection of 3rd party equity bids as part of the Government's transparency policy.
 - The Equity Funding Competition will be conducted in a manner reasonably to be expected by prospective equity investors having regard to the quantum of the investment and the risks assumed by equity investors. The Preferred Bidder will determine the Equity Funding Competition procedures which must be appropriate to assess the quantitative and qualitative merits of the candidates and compile their review in a readily accessible format for comparative analysis. These will be discussed with the Trust and IUK EU before the Equity Funding Competition is launched.

- **Bidders Advisers:** At financial close, advisers to the Project Co, the senior debt funder's technical advisor and the model auditor will be required to give letters of reliance to the equity investors (including any third party equity investors introduced following an equity funding competition).

Public Sector Equity

4.1.9 The following approach will apply:-

- The public sector (through the Infrastructure UK Equity Unit ("IUK EU")) will have the right but not an obligation to invest 10% of the equity required for the scheme through a combination of sub-debt and equity (in the same proportion to other equity providers). The decision by the IUK EU on whether or not to invest equity in the scheme will be based on its analysis of the information provided in accordance with the paragraphs on Bid Submissions elsewhere in this document and the requirements below. Bidders should note that the IUK EU will expect any public sector equity to be invested on a like for like basis alongside all other equity in the scheme. Bidders should assume when defining how the equity and the subordinated debt requirement of Project Co will be met that the IUK EU chooses not to invest equity, and state whether their response would differ, other than in quantum, if the decision was different.
- **Directors of Project Co :** HM Treasury will have the right to appoint a Director to ProjectCo. That director will be entitled to receive a fee that is commensurate with the level of remuneration received by other directors of Project Co.
- **Equity Bid Information:** Bidders are required to provide the information set out in the table at Appendix 8 ("PF2 Equity Bid Information") to enable the IUK EU to undertake due diligence on a proposed equity investment prior to appointment of the Preferred Bidder. The PF2 Equity Bid Information is to be provided by Bidders and no work by external advisers should be needed.
- **Equity Documents for Review:** Bidders should review the equity documentation (Shareholders Agreement, Articles, Loan Note Instrument) included at Appendix 8 (PF2 Equity Bid Information) and will be expected to provide comments on these during stage 4 of the dialogue. A table will be provided by the Trust within which bidders' comments should be set out. Bidders should also review the Heads of Terms for the Construction Contract and FM Contract which are included at Appendix 8 as part of the public equity documentation. It will be a requirement of any investment of public equity that the matters referenced in these documents have been adequately included. Bidders will also be expected to provide comments on these documents during stage 3 of the dialogue.
- Following appointment of the Preferred Bidder, and preparation and agreement of detailed project documentation, the IUK Equity Unit will require:
 - Response to IUK Equity Unit's legal DD questionnaire from the legal advisers to Project Co which confirms the accuracy of the bid information used by the IUK Equity Unit for its preliminary due diligence (or advises where this has changed)
 - A copy of the opinion reports prepared by the technical adviser and model auditor to the participants of the debt funding competition in respect of the scheme, and a copy of the reports prepared by the insurance advisor to the senior debt funders.
 - A copy of all agreements (in their most current form).
 - The right to ask Project Co's advisers to clarify points arising from the Due Diligence Memorandum and the above reports.
 - The right to participate directly in the negotiation of all documentation the shareholders are required to sign noting that the IUK Equity Unit would work in conjunction with other prospective equity investors using the same advisers.
 - The financial model and certain sensitivity scenarios to the base case required by the IUK Equity Unit.
 - Assistance as reasonably requested by the IUK Equity Unit to assist in its evaluation of the proposed investment.

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- At financial close, legal and insurance advisers to Project Co, the senior debt funder's technical adviser and the financial model auditor to give letters of reliance to the equity investors (including IUK Investments Limited and any third party equity investors introduced following any equity funding competition) in a form reasonably required by the IUK Equity Unit.

5 Evaluation Process

5.1 Introduction

5.1.1 This section sets out the process for evaluation of the Bidder's proposal at the following stages:

- Final Bid

5.2 Bid Deliverables

5.2.1 The Bid Deliverables to be submitted for each stage of the Dialogue process are set out in **Appendix 3**. This document shows the basis of evaluation at CD evaluation stages 4 and 5. It presents requirements at each stage. The formats required and pro forma references are specified in the document.

5.2.2 The Bid Deliverables specified will be evaluated as part of the formal process at Stages 4 – 5.

5.3 Compliance Testing

5.3.1 Compliance tests will be applied to assess Final Bid to ensure that:

- All specified deliverables are included
- Those deliverables specified as compliance are fulfilled e.g. a bid which demonstrates compliance with the set price targets.
- All deliverables are in the required formats and the prescribed proformas have been used
- Sufficient information at the required standard has been provided to enable a full evaluation
- Compliance with instructions regarding Reference and Variant Bids has been followed (see Section 5.8)

5.4 Evaluation Approach

5.4.1 The Final Bid will be evaluated using the methodology outlined below.

5.4.2 Only Bid Deliverables that have changed since the Draft Final Bid will be evaluated at the Final Bid. The scores will then be combined with the Draft Final Bid Scores of the remaining deliverables to complete the evaluation.

Scoring of Bids

5.4.3 Scoring of the Final Bid will be undertaken by the Evaluation Teams.

5.4.4 All scores will be reviewed by the Evaluation Moderation Committee before an evaluation is completed.

5.4.5 Each Bid Deliverable will be assessed for the extent to which the Trust's requirements have been met and any additional benefits offered using the scoring structure presented in Table 2 below apart from Cost which will be scored as described in section 5.6.

Table 2 Scoring of Bids

Score	General Definition	Criteria Based Definition
1	Unacceptable	Fails to meet requirements for almost all key criteria.
2	Very poor	Fails to meet requirements for many of the key criteria.
3	Poor	Fails to meet requirements for some key criteria.
4	Adequate	Meets requirements for all key criteria.
5	Good	Meets requirements / performs well for all key criteria and offers some additional benefits.
6	Excellent	Exceeds all project criteria and offers significant additional benefits.

5.4.6 The evaluation criteria to be used in the assessment of Bid Deliverables are presented in the Bid Deliverable tables presented at **Appendix 3**.

5.4.7 The Trust intends to receive and evaluate the Bid through Bravo Solution. This will provide a robust audit trail for the Project.

5.4.8 Bids scoring 1 (unacceptable) will be assessed for impact by Core Project Team. Scores at this level for one or more Bid Deliverables may render the bid non-compliant.

5.5 Weighting

5.5.1 The Trust intends to evaluate the Bidder through the application of the evaluation criteria, scoring and weightings set out below. The Trust has decided to carry the CD stage 3 weights through to CD stage 4 and CD stage 5 (at a work stream level) so that direct comparison of the scores from interim submission to Draft Final and Final Bid can be made.

5.5.2 The Trust will expect the quality score for the solution achieved during evaluation at Draft Final and Final Bid stage to equal or exceed the quality score achieved at Interim Submission. This increase was demonstrated at Draft Final Bid stage and the Trust provided detailed feedback and expects the Bidder to improve the Bid to meet the target by Final Bids. Each main criterion corresponds with a workstream and has been allocated an overall weighting shown in Table 3.

Table 3 Weighting by main criterion / workstream

Main Criterion / Workstream	Weighting CD Stage 3	Weighting CD Stage 4/5
Cost	10%	10%
Clinical and Operational Functionality	34%	34%
Estates and Technical	24%	24%
Legal, Commercial and Finance	14%	14%
Hard FM	9%	9%

Subjective Assessment of Design Vision	9%	9%
Total	100%	100%

5.5.3 The weighting for each Bid Deliverable is set out in **Appendix 3**.

5.6 Price Compliance

5.6.1 The Trust intends to score Cost as a Bid Deliverable.

5.6.2 The reference model to be evaluated will include an assumption that the SPV will provide 50% of equity (as outlined above) and with a capital contribution of £100m. It will also for the avoidance of doubt include the provision of AGVs.

5.6.3 Bidders are set a price target of a first year target UP of less than £22.29m and a NPV of the UP over the operational period of less than £265.5m for their bid to be compliant. These hurdles are based on the term sheet attached at Appendix 11.

5.6.4 The Trust may adjust the targets for the Bidder if the Bidder can clearly demonstrate that their solution will provide efficiencies in other Trust costs e.g. energy / nursing or if the Trust believes and can demonstrate that the Bidders solution will increase Trust revenue costs.

5.6.5 The Trust will at all stages apply a compliance test of price being less than target before evaluating the Final Bid.

5.6.6 Provide that the Bidder complies with the hurdle the Bidder will score 100% on price.

5.7 Value for Money Assessment

5.7.1 Provided that the Bidder submits a bid which is compliant on price (and other compliance criteria are met) the Trust will evaluate all the Bid Deliverables as outlined in section 5 above. The evaluation will generate an overall weighted score for each Bidder.

5.8 Reference and Variant Bids

5.8.1 The Bidder must submit a Reference Bid.

5.8.2 The Trust will not consider Variant Bids at Final Bid stage that have not been explored with the Trust as part of the Dialogue phase of the process. If Variant Bids are to be proposed, The Bidder is requested to discuss their intentions with, and seek approval of, the Trust at the earliest opportunity during the Dialogue. The Trust will then give directions and any proposed limitations in order to avoid abortive work on the part of the Bidders as well as the Trust evaluation team. The Trust will retain the right to determine whether or not it will accept a Variant Bid. The Trust is not expecting the Final Bid to include any Variant Bids.

5.8.3 If the Bidder wishes to submit any Variant Bid, they should be aware that they will not be considered unless the Reference Bid has been submitted, as set out in the Bid Deliverables.

5.8.4 The deliverables are for the Reference Bid, and a clear statement of departures must accompany any Variant Bid. The basis of departure must be supported by the same level of detail as required for the reference Bid Deliverables. Depending on the nature of the Variant Bid this may also include a requirement for information not specified in the building and engineering deliverables.

5.8.5 As a minimum each Variant Bid shall contain:

- The Bidder's proposed pricing for the Variant Bid and proposed Unitary Payment
- The items specified for a Variant Bid only to the extent they differ from the Reference Bid, save for the financial submission where the information required must be submitted for a Reference Bid and any Variant Bid
- Assumptions, clearly specifying where the proposals differ from the Reference Bid
- A clear specification of such change to the terms of the Reference Bid and the effect (including pricing effect) of such variation from the Reference Bid
- Details of any amendments to be made to the Project Agreement

5.8.6 In each case, all such changes and/or amendments having been discussed and agreed with the Trust in advance of closure of the Dialogue.

6 Project Management and Administration

6.1 Communication

- 6.1.1 All communication with the Project Office will be made through BravoSolution to ensure that an effective audit trail is maintained. No direct communication with other Trust staff, outside of scheduled meetings, should be attempted, as they are not authorised to respond outside the formal channels. The Project Office will acknowledge each message within 2 working days and will respond by return or will indicate the timescale for a full response.
- 6.1.2 Communication requiring a phone call will be managed through the Project Office on this number: 0121 507 5566.

6.2 Requests for Information

- 6.2.1 The process for requests for information will be as follows:
- Requests for information will be sent via Bravo on the Trust Request for Information (RFI) form (as issued by the Project Office).
 - The Project Office will acknowledge receipt of RFIs via Bravo within 1 working day.
 - The RFI will be assessed in the Project Office and forwarded on to the relevant Project Team member to prepare the response.
 - A response will be made within 5 working days of the RFI, unless this is not possible, in which case the Project Office will inform the Bidder when the response will be available.
 - If the request has been sent in as 'Commercial in Confidence', the Project Manager / Commercial Manager will review the request and decide if this is appropriate. If, in the view of the Project Manager / Commercial Manager the request is not Commercial in Confidence, the request may be returned to the Bidder, stating that the Trust does not consider the request to be confidential to that Bidder and should they wish to proceed with the request, the Bidder must agree to its disclosure. If the Project Manager / Commercial Manager agree that the request is Commercial in Confidence, the Project Office will prepare the response, which will then only be sent to the originator of the request.
 - The Trust will issue confidential responses via Bravo to the Bidder's secure response folder on Bravo.
 - A database of all non-commercially confidential RFIs will be maintained by the Project Office. This will be available to all bidders on Bravo.
- 6.2.2 In the event of any difficulties using this system, contact should be made with the Project Office by phone on 0121 507 5566.
- 6.3 **Data Room**
- 6.3.1 An electronic data room has been established on BravoSolution. This facility contains information that Bidders may require during the procurement phase of the Project.
- 6.3.2 New documents, updates or data requested will be uploaded to the data room and will be available to all Bidders. E-mail alerts will let Bidders know when new information is available.

6.4 Submission of Bid Deliverables

Electronic Submission

6.4.1 A response form on BravoSolution has been created for Bidders to return electronic versions of the Bid Deliverables in a secure environment. All Bid Deliverables must be submitted electronically as well as in hard copy.

6.4.2 All Bid submissions will be delivered via the BravoSolution secure portal before 11.00AM local time on the relevant Bid submission date, as set out in Table 4.

Hard Copy Submission

6.4.3 Bidders should note that these instructions may change if the Trust amends its Standing Financial Instructions to allow electronic receipt of tenders. Bidders will be informed accordingly.

6.4.4 One hard copy, delivered before 11:00AM on the submission date, as set out in Table 4 below, will be required to complete each Bid.

6.4.5 The packaging of the documents must not include any mark or identifier of the Bidder. It should be clearly labelled with the following:

MIDLAND METROPOLITAN HOSPITAL PROJECT PROCUREMENT DOCUMENTS
TENDER DO NOT OPEN
NOT TO BE OPENED BY PROJECT OFFICE BEFORE [DATE TO BE INSERTED]

The submission should be delivered to:

Simon Grainger-Lloyd
Trust Secretary
Sandwell and West Birmingham Hospitals NHS Trust
Trust Headquarters
1st floor - Health & Wellbeing Centre
Sandwell General Hospital
Lyndon
West Bromwich
B71 4HJ

6.4.6 Receipt of the hard copy will be recorded in the Chief Executive's office as a record of the formal submission. This delivery should therefore be made in good time. It is the sole responsibility of each Bidder to ensure that Bid submissions are received at the Trust by the closing date and time. Any Bidder failing to meet the closing date and time may be eliminated from the CD process.

Table 4 Submission Dates

Stage	Submission Type	Electronic / Paper	Submission Deadline
CD Stage 5	Final Bids	Electronic and hard copy	17 th July 2015

6.4.7 The Trust reserves the right to alter the bid submission dates.

6.4.8 Items that have not been explicitly requested as Bid Deliverables will not be considered by the Trust and must not form any part of the bid.

- 6.4.9 The Bidder may issue appendices where these provide valuable background information in support of a specific Bid Deliverable, in which case they will be considered in the evaluation. Appendices must not contain any clarification, justifications or caveats relating to the Final Bid.

Format of Responses

- 6.4.10 All submissions made by the Bidder must be written in English and be signed by an authorised representative of each relevant company or organisation.
- 6.4.11 The responses to the Bid Deliverables must:
- Be detailed, yet succinct and focused
 - Follow the format and numbering convention specified in the Bid Deliverables and should be cross-referenced accordingly
 - Use the correct proformas if specified in the Bid Deliverables- proforma references are included in the bid deliverable tables and the pro formas themselves can be accessed on Bravo
 - Include a list of contents and should reference supporting appendices where indicated
- 6.4.12 Appendices must be cross referenced to the appropriate section of the Bid submission and will follow the same formatting conventions outlined above.

Return of Certificates

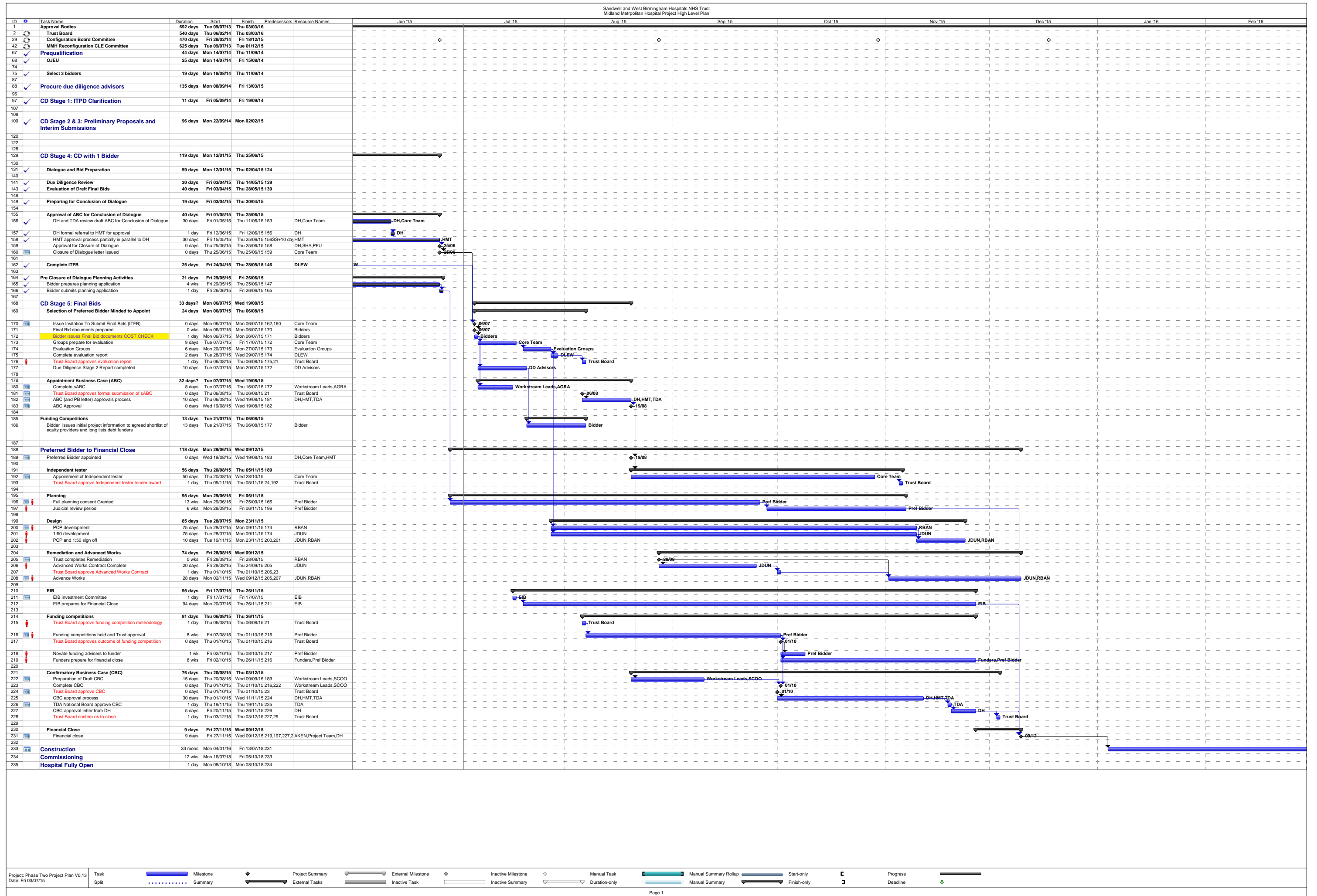
- 6.4.13 The Trust requires the Bidder to make certain undertakings if it wishes to remain in the competition. These undertakings include signing the following certificates, which must be completed and submitted with each bid submission. Copies of the certificates are provided in **Appendix 7**:
- Certificate of Non-Canvassing.
 - Certificate of Non-Collusive Tendering.
 - Confidentiality of undertakings.
 - PQQ Validation Certificate.

7 List of Appendices

Appendix no.	Appendix Name
1	Project Plan
2	Not Used
3	Bid Deliverables
4	Not Used
5	Funding Protocol
6	Market Testing Requirements
7	Certificates
8	PF2 Equity Bid Information
9	Funding Competition Timeline
10	Not Used
11	Hurdle Term Sheet

ITPD Volume 4

Appendix 1 – Project Plan



The Midland Metropolitan Hospitals Project		CD Stage 4		
Bid Deliverables Summary		Section	Sub Work stream	Work stream
Design Vision				9.00%
Estates and Technical				
1	Capital Costs	3.60%		
2	Schedule of Accomodation	2.40%		
3	Architecture	4.80%		
4	Town Planning	1.20%		
5	Engineering	4.80%		
6	Equipment	2.40%		
7	IM&T	2.40%		
8	Design Construction Project Management	2.40%		
				24.00%
Clinical				
1	Co-locations/adjacencies & Patient Flows	5.78%		
2	Impact on workforce	4.08%		
3	Soft FM & Goods Flows	4.08%		
4	Education & Training	2.04%		
5	Privacy, Dignity & Safeguarding	3.06%		
6	Future Proofing	3.06%		
7	Infection Control	3.06%		
8	Health Care Planning	2.38%		
9	Moving and Handling/ergonomics	2.38%		
10	Business Continuity	2.38%		
11	Outline Commissioning Plan	1.70%		
				34.00%
Commercial				
	Legal		5.00%	
	Finance			
1	Approach to Funding	2%		
2	Payment Mechanism	3%		
3	Financial Assumptions	Affordability		
4	Funding Competition	Compliance		
5	Unitary Payment Phasing	Affordability		
6	Income Generation	Affordability		
7	Tax and Accounting	Affordability		
			5.00%	
	FM			
1	Approach to Management of Services	1.80%		
2	Approach to Management of Staff	1.80%		
3	Method Statements and Service Provision	4.50%		
4	Facilities Management Service Costs	0.90%		
			9.00%	
	Project Management		2.00%	
	Regeneration		2.00%	
				23.00%
Total Quality		90.00%		
Price		10.00%		
Total		100.00%		

Competitive Dialogue (CD) Design Vision Bid Deliverables

Bidder outputs for all stages to conform to the following formats:

Text in Microsoft Word.

Spreadsheets in Microsoft Excel.

Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
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	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
CD Stage 4: Draft Bid Deliverables				
DV4.1	<p>Achievement of the Design Vision Value 1: 'Inspirational, attractive and imaginative'</p> <p>Bidders are asked to respond to this statement: <i>'A modern, iconic building that creates a sense of pride and looks to the future as a leader in healthcare design. Form and function are complementary and design adds value throughout the building.'</i></p> <p>Narrative describing how the Design Vision Value 1: 'Inspirational, attractive and imaginative' has been achieved in the design proposals.</p> <p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>	Narrative and images presented in PDF format.	0.90%	<p>Are there clear ideas behind the design of the building?</p> <p>Does the building communicate its function as a high reputation acute hospital?</p> <p>Does the building generate a positive image?</p> <p>Is there potential for entry to design awards?</p> <p>Is the building likely to influence future healthcare designs?</p> <p>Is the design iconic in impact?</p> <p>Will the new building create a focal point for the local area?</p> <p>Does the building have impact at night as well as in daylight?</p> <p>Does the research / education / administration facility convey the Trust's status as an academic centre and a successful teaching hospital?</p> <p>Is the building interesting to look at and move around in?</p> <p>Are external colours and textures appropriate and attractive?</p> <p>Do the external materials and detailing appear to be of high quality?</p> <p>Is the interior of the building attractive in appearance?</p> <p>Will the main entrance be easy to find and does it draw visitors towards it?</p> <p>Are the entrances obvious and logically positioned in relation to likely points of arrival on site?</p> <p>The building is clearly understandable</p> <p>Does the design use artwork / colour / graphics to support wayfinding?</p>
DV4.2	Achievement of the Design Vision Value 2: 'Welcoming'	Narrative and images presented in PDF format.	0.90%	<p>Will the main entrance be easy to find and does it draw visitors towards it?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Bidders are asked to respond to this statement: <i>'The building provides welcoming spaces, a homely feel and human scale. Art is integral to the design, promotes wellbeing and supports wayfinding. Receptions and waiting areas are easy to find and wayfinding is clear and intuitive.'</i></p> <p>Narrative describing how the Design Vision Value 2: 'Welcoming' has been achieved in the design proposals.</p> <p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>			<p>Are the entrances obvious and logically positioned in relation to likely points of arrival on site?</p> <p>The building is clearly understandable</p> <p>Does the design use artwork / colour / graphics to support wayfinding?</p> <p>Is human scale achieved to ensure that users feel welcome as they enter and move around the building?</p> <p>Are spaces designed with good balance between height and width?</p> <p>Does ambient lighting contribute to creating a homely feel?</p> <p>Is artwork integrated into the design of the building?</p> <p>Are children's areas designed with fun and diversion considered?</p> <p>Do corridors look as if movement around the building will be easy and pleasant avoiding blandness, crowding or claustrophobia?</p> <p>Will catering areas provide pleasant café style environments to facilitate conversation and leisure?</p> <p>Are outside spaces designed with areas for sitting and walking?</p> <p>Are outside spaces designed with effective planting at various levels to soften the hard environment?</p> <p>Are outside spaces designed with variation and good use of materials to create interest?</p>
DV4.3	<p>Achievement of the Design Vision Value 3: 'Reassuring'</p> <p>Bidders are asked to respond to this statement: <i>'The environment feels calm and professional. High quality design and materials create expectation of high quality health services. Users of the building will feel safe and confident in the care they will receive.'</i></p> <p>Narrative describing how the Design Vision Value 3: 'Reassuring' has been achieved in the design proposals.</p>	Illustrated narrative presented in PDF format.	0.90%	<p>Will the building create a positive first impression as a non-threatening place to be?</p> <p>Does the building convey a professional image for the Trust?</p> <p>Does the building support the Trust customer care promises?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>			<p>Does the design create a caring image for the Trust?</p> <p>The building projects a caring and reassuring atmosphere?</p> <p>The building appropriately expresses the values of the NHS</p> <p>Will the building facilitate customer care and welcoming services?</p> <p>Will the design make patients and staff feel safe by avoiding a sense of isolation and perceived lack of security?</p> <p>Outdoor spaces are provided with appropriate and safe lighting indicating paths, ramps and steps</p> <p>Will outside spaces be well lit at night?</p> <p>Will outside spaces feel safe?</p> <p>Will car parks feel safe?</p> <p>Is there a line of sight from points of access to reception desks in each area?</p> <p>Is the layout clear and simple?</p> <p>Do layouts help patients know what they need to do when they move around the building?</p> <p>Do reception areas give patients confidence that they have been checked in properly and will not miss their appointment?</p>
DV3.4	<p>Achievement of the Design Vision Value 4: 'Light and airy'</p> <p>Bidders are asked to respond to this statement: <i>'The building will convey a sense of space and light and will provide outside views. The design of the building will maximise use of natural light. Provision of lighting will promote the 'light and airy' impact without glare and will be easy to control.'</i></p> <p>Narrative describing how the Design Vision Value 4: 'Light and airy' has been achieved in the design proposals.</p> <p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>	Narrative and images presented in PDF format.	0.90%	<p>Does the design maximise use of windows to bring in natural light?</p> <p>There are good views inside and out of the building</p> <p>Are external views maximised from public areas?</p> <p>Are external views achieved from all beds?</p> <p>Is interest designed into external views where possible?</p> <p>Can patients and staff access landscaped outdoor space?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
				<p>Does the design draw the outside views in?</p> <p>Will external planting and artwork enhance the views from inside the building?</p> <p>Does the design contribute to a sense of light and space?</p> <p>Do colour and materials contribute to a sense of light and space?</p> <p>Does the lighting support a light and airy feel without glare?</p>
DV4.5	<p>Achievement of the Design Vision Value 5: 'Clean without being clinical'</p> <p>Bidders are asked to respond to this statement: <i>'The building will facilitate cleaning in a way that is obvious to patients and staff, so that it looks clean and tidy. This will be achieved without presenting a harsh clinical feel. Pleasant colours, finishes, shapes and designs will make users feel comfortable in the environment and will support wellbeing.'</i></p> <p>Narrative describing how the Design Vision Value 5: 'Clean without being clinical' has been achieved in the design proposals.</p> <p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>	Narrative and images presented in PDF format.	0.90%	<p>Does the design facilitate a clean look which minimises clutter?</p> <p>Does the design promote tidiness?</p> <p>Do the surfaces look easy to clean?</p> <p>Does the design look as though it would promote easy cleaning?</p> <p>Is the interior design sympathetic and welcoming?</p> <p>Do furnishings create a friendly, comfortable feel?</p> <p>Are internal colours and textures used to create interesting and attractive contrasts?</p> <p>Does the interior design solution present a non-clinical finish?</p>
DV4.6	<p>Achievement of the Design Vision Value 6: 'Sympathetic to the environment'</p> <p>Bidders are asked to respond to this statement: <i>'The building will be a catalyst for regeneration of the local area. It will be an asset to the local community both in its outward appearance and in the provision of facilities for local people. Sustainability is fundamentally integral to the design.'</i></p> <p>Narrative describing how the Design Vision Value 6: 'Sympathetic to the environment' has been achieved in the design proposals.</p>	Narrative and images presented in PDF format.	0.90%	<p>Will the building create architectural impact without overwhelming the area?</p> <p>Does the height, volume and skyline of the building relate well to the surrounding environment?</p> <p>Will design themes be transferable to local development design as it moves forward?</p> <p>Does the building contribute positively to its locality?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>			<p>The building is sensitive to neighbours and passers-by</p> <p>Does the hard and soft landscaping around the building contribute positively to the locality?</p> <p>Are civic pride themes addressed in the design, wayfinding strategy and artwork?</p> <p>Can design adjacent to the canal create opportunities for regeneration?</p> <p>Do engineering solutions for sustainability enhance the visual design?</p> <p>Does the scheme facilitate use of facilities by local residents?</p> <p>Does the landscape design improve a sense of local wellbeing?</p> <p>Does the site encourage local residents to walk on the site?</p>
DV4.7	<p>Achievement of the Design Vision Value 7: 'Fully Accessible'</p> <p>Bidders are asked to respond to this statement: <i>'The building will meet the needs of all users whatever their level of physical ability and mode of transport. Independence will be promoted in accessing and moving around the building.'</i></p> <p>Narrative describing how the Design Vision Value 7: 'Fully Accessible' has been achieved in the design proposals.</p> <p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>	Narrative and images presented in PDF format.	0.90%	<p>Does the design support delivery of the MMH Access Policy?</p> <p>There is good access from available public transport including any on site roads.</p> <p>Is access to the hospital facilitated for people with physical, sensory, learning or mental health impairments?</p> <p>Has an equality impact assessment been undertaken?</p> <p>Is access in inclement weather facilitated?</p> <p>Are outdoor spaces provided with appropriate and safe lighting indicating paths, ramps and steps?</p> <p>Are pedestrian routes obvious, pleasant and suitable for wheelchair users and people with other disabilities/impaired sight?</p> <p>Is there good access from available public transport including any on-site roads?</p> <p>Does the building promote independence?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
				<p>Does the hospital feel safe and secure?</p> <p>Will car parks feel safe and secure?</p> <p>Will lifts be easy to find?</p> <p>Will stairs be easy to access to encourage exercise where appropriate?</p> <p>Will lifts be easy to access for all users?</p> <p>Are colour schemes designed to avoid difficulties for partially sighted users?</p>
DV4.8	<p>Achievement of the Design Vision Value 8: 'Supports Privacy and Dignity'</p> <p>Bidders are asked to respond to this statement: '<i>The building design will support privacy and dignity throughout the patient pathway.</i>'</p> <p>Narrative describing how the Design Vision Value 8: 'Supports Privacy and Dignity' has been achieved in the design proposals.</p> <p>This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams.</p> <p>Maximum of 6 sides of A4.</p>	Narrative and images presented in PDF format.	0.90%	<p>Does the design support delivery of the Privacy and Dignity Policy?</p> <p>How effectively does the design promote freedom from intrusion in areas personal / sensitive to individuals?</p> <p>Would the design make patients feel worthy of respect?</p> <p>Have age, ethnicity, gender, social, cultural, psychological and physical needs been considered?</p> <p>Has the modesty of patients been considered to avoid embarrassment?</p> <p>Does the design support patient involvement in decision making?</p> <p>Does the design support gender segregation?</p> <p>Will the design avoid crowding in corridors, waiting areas, doorways and receptions?</p> <p>Does the design support dignified use of toilet facilities?</p> <p>Are beds arranged for maximal privacy in four bedded bays?</p> <p>Are arrangements for privacy in bedrooms effective whilst maintaining good levels of patient observation?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
				<p>Does design and orientation of en suite bathrooms support privacy?</p> <p>Are lines of sight into bedrooms across courtyards minimised?</p> <p>Will patients feel that they can talk without being overheard when required?</p> <p>Has the need to support patients and their loved ones following the giving of bad news been considered?</p>
DV 4.9	Response to Design Vision: Value 9 'A Good Place to Work'	<p>A 3D 'walkthrough' from the main concourse to a staff area/space. Narrative to support and explain the materials, lighting, personal controls and any other technology within the space.</p> <p>Lighting study in a selected 'staff' room to demonstrate how both the natural and artificial lighting levels influence the space throughout the day.</p>	0.90%	<p>Are the break out spaces sufficiently discreet to allow staff privacy from the public/patients during breaks, etc?</p> <p>Do the staff areas reflect a non clinical environment to provide staff with a break away from the main clinical spaces of the rest of the building?</p> <p>What level of personal control will staff have over the environment of their space ie: lighting, heating, ventilation, etc?</p> <p>Does the building reflect smart innovation and ideas around areas such as storage, technology and the environment?</p> <p>Does the choice of internal materials and finishes convey a non clinical feel in order that staff see a clear separation between their clinical working environment and the spaces they can relax in?</p>
DV4.10	<p>Artistic Expression</p> <p>Narrative detailing how the design responds to the requirements outlined in the Art Strategy including the following:</p> <p>Artistic expression integrated into the design of the building</p> <p>Provision for hanging / presenting artwork in the building</p> <p>Approach to engagement with Art Steering Group</p> <p>Integration between artistic expression and way finding</p> <p>Encouraging on-going development of the Art Programme</p>	Narrative and supporting materials presented in PDF format.	0.90%	<p>How do bidders propose to engage with staff and the local community in the development of integrated artwork?</p> <p>Will the artistic expression integrated into the design deliver the Design Vision and Vision for art in the hospital?</p> <p>Does the integrated artwork present (and / or facilitate display of) a range of the media proposed in the Art Strategy (paintings, drawings, photographs, textiles, crafts, sculpture, water, plants, sound and music, drama, mime, dance, writing, poetry, light, reflection, moving image, moving 3D art)?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>This should include reference to all forms of artistic expression referred to in the strategy.</p> <p>It should be supported by sketches, photos, diagrams as required.</p> <p>Maximum of 12 sides of A4.</p>			<p>Have a selection of the Trust's art themes / messages, outlined in the Art Strategy, been included in the integrated artwork (heritage and civic pride, celebration of health and medicine, healthy lifestyles, local creativity and engagement, the power of storytelling, bringing the outside in)?</p> <p>How effectively has artwork and colour been used to support wayfinding?</p> <p>How is unity of artistic expression promoted across public areas?</p> <p>Are the themed murals proposed effective in delivering the vision for art in the hospital</p> <p>Do children's wards contain murals, bright colours and areas to support participation in art activities?</p> <p>Would the artwork proposed for the children's areas reduce anxiety and create interest / fun?</p> <p>Does artwork include safe opportunities to engage physically e.g. touching, climbing and walking through?</p> <p>Has keynote artwork been designed into key public area(s) and do these pieces deliver the Design Vision and Vision for art in the hospital?</p> <p>Does the design facilitate display of artwork, including approach to hanging / positioning and lighting?</p> <p>Is there at least one area designated for changing / permanent displays of artwork? Are proposals for display mounting systems included?</p> <p>Has provision been made for exhibition / performance space in public areas? Does the design facilitate small group performance art?</p> <p>Has cleaning of artwork been considered in the design?</p> <p>Does the artwork proposed for the public realm support the Design Vision and Art Vision?</p> <p>Have opportunities for artistic expression been utilised in the external design including the hard landscaping and outdoor furniture?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
DV4.11	<p>Three dimensional model</p> <p>Bidders will prepare a three dimensional model in hard and electronic format.</p> <p>The model(s) will be used with engagement groups and individuals as a visual aid to understanding the scheme.</p>	Three dimensional model	Not scored	
DV4.12	<p>Presentation to DQI Event.</p> <p>The Trust will organise one or more events for the Design Vision Group, local community and staff.</p> <p>Bidders will make a general presentation about their design and will specifically address the following points: 1:500 / Diagrammatic stacking plan Generic Ward Cluster layout Approach to Privacy and Dignity Approach to accessibility Approach to expansion , contraction, change in use and introduction of new technology</p> <p>Feedback from the event will inform evaluation. A DQI evaluation will be conducted and the outcome will inform evaluation.</p>	Presentational materials suitable for the general public.	Not scored but feedback and DQI will inform the evaluation	

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
Total			9.00%	

Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	Final Tender Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning			
	Heading			

Competitive Dialogue (CD) Clinical

Bidder outputs for all stages to conform to the following formats:

Text in Microsoft Word.

Spreadsheets in Microsoft Excel.

Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	CD Stage 4: Design Deliverables Part 2			
	Competitive Dialogue			
CL 4.0	<p>1:200 layouts required at CD stage 4</p> <ul style="list-style-type: none"> • Departments on Acute Assessment half floor template including AAU, generic ward, SAU, neighbourhood hub, therapies area and clinical admin zones • Departments on the Maternity half floor including Delivery Suite, Neonatal Unit, Antenatal Clinic, neighbourhood hub, multi-faith centre, clinical admin zone • Departments of the women's wards half floor including maternity wards, antenatal day assessment unit, women's surgical ward, emergency gynae assessment unit, neighbourhood hub, clinical admin zone • Departments on the Paediatric half floor including Children's Unit, Paediatric Outpatient Department, Specialist Outpatients • Departments on the Cardiac half floor including Cardiology Diagnostics, Respiratory Physiology, Neurophysiology, Cardiac Catheter Laboratory Suite, Cardiology Ward, Stroke Unit, Therapies, neighbourhood hub, clinical admin zone • Departments on the plant half floor including plant rooms, EBME, education, relatives overnight, research zone, neighbourhood hub, clinical admin zone • Remaining ward half floors, clinical admin zones and neighbourhood hubs including surgical wards, respiratory ward, haematology ward, other medical wards <p>Any significant changes to layouts described in CL3.0</p>			

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
CL 4.01	<p>1:50 room layouts required at CD stage 4</p> <p>ED half floor</p> <ul style="list-style-type: none"> • Main Imaging General xray room • CT • MRI • Ultrasound <p>Adult Assessment floor</p> <ul style="list-style-type: none"> • Multi bed/trolley bay • Two bi plane Cath labs with shared control room • Therapy hub adjacent to stroke ward <p>Paediatric floor</p> <ul style="list-style-type: none"> • Paediatric assessment unit • Audiometry/evoked response rooms with adjoining observation room • Reception wait and childs play <p>Delivery suite half floor</p> <ul style="list-style-type: none"> • Delivery room with pool and ensuite • Neonatal six cot nursery • Transitional room and ensuite • Multifith <p>Maternity ward floor</p> <ul style="list-style-type: none"> • ADAU • EGAU • Overnight stay 			
	<p>Other ward half floors</p> <ul style="list-style-type: none"> • Pharmacy Dispensing room with robot. 			
	The following outputs are requested from the Bidders to assist evaluation of design solutions:			
	Section 4.1: Co-locations / Adjacencies / Patient Flows			
CL4.1.1	<p>Response to clinical model</p> <p>Bidders are to provide a narrative report in response to the clinical model and how this can be achieved in the design of the hospital.</p> <p>It should also include any possible/recommended innovations and improvements to the clinical service model and any possible constraints.</p>	<p>Narrative report including diagrams as required (maximum of 6 pages)</p>	<p>0.68%</p>	<p>Has the bidder appreciated and interpreted the Trust's clinical service model and health planning strategy?</p> <p>Do the clinical and supporting department adjacencies support the models of care?</p>
CL4.1.2	<p>Interdepartmental Adjacencies</p> <p>Bidders are to provide drawings and supporting narrative to illustrate how the specified adjacencies have been achieved.</p>	<p>Whole Hospital plans at 1:500.</p> <p>Diagrammatic stacking plan.</p> <p>Fly through</p>	<p>1.70%</p>	<p>Have the specified adjacencies been achieved?</p> <p>Have the adjacencies specified but not achieved in the PSC/ADR been achieved?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>For the whole hospital this should include:</p> <p>Locations of clinical departments including adjacencies (vertical and horizontal) between clinical departments and between clinical and non-clinical departments, supporting areas and circulation routes</p> <p>Possible/recommended innovations and improvements to the clinical service model from whole hospital layout</p> <p>Possible/recommended innovations and improvements to the FM operational policy/model from whole hospital layout</p> <p>Response to whole hospital clinical/operational policies e.g. Infection Control, Bariatric Care, Major Incident, Radiation, Medicines Management. Any specified adjacencies that haven't been met with reasons and suggested alternatives</p> <p>The report should provide a full commentary on the drawings and make specific reference to the issues above.</p>	Supporting narrative report including diagrams as required (maximum of 20 pages).		Has the bidder identified any constraints to implementing the clinical service model at whole hospital level and what are the implications?
CL4.1.3	<p>Patient / Visitor Flows</p> <p>Bidders are to provide drawings and supporting narrative to illustrate how the patient and visitor flows have been achieved.</p> <p>For the whole hospital and for each department this should include:</p> <p>Description of patient flows</p> <p>Description of visitor flows</p> <p>For the whole hospital a matrix of journey times between entrance and clinical departments, and departments, and between different departments</p> <p>For specified departments a matrix of journey times between entrance and the department, between different rooms within the department, between the department and those departments it has a key adjacency with.</p> <p>Approach to privacy and dignity e.g. separation of flows</p> <p>Possible/recommended innovations and improvements to patient or visitor flows from whole hospital layout or departmental layout</p> <p>Any specified journey times that can't be met with reasons and suggested alternatives</p> <p>The report should provide a full commentary on the drawings and make specific reference to estimated journey times.</p>	<p>Marked up whole hospital plans at 1:500.</p> <p>Diagrammatic stacking plan</p> <p>Fly through</p> <p>1: 200 layouts (CL4.0)</p> <p>Supporting narrative report including diagrams as required (maximum of 20 pages).</p>	1.70%	<p>Do the patient journey routes through the hospital and within departments make clinical and operational sense e.g. as direct as possible, minimal duplication of journeys, minimal journey times, facilitate privacy and dignity etc?</p> <p>Do the adjacencies meet the specified journey times?</p> <p>What are the journey times for key flows including emergency admissions, critical care patients, elective surgical admissions, deceased patients from wards to the mortuary etc?</p> <p>How does the layout allow the specified separation of flows including dedicated access points and lifts? i.e. goods, staff, visitors, ambulatory patients, patients in nightwear or hospital gowns, deceased patients</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
CL4.1.4	Intradepartmental Adjacencies Bidders are to provide drawings and supporting narrative to illustrate how the specified adjacencies have been achieved. For each department this should include: Name, size and function of each room within department Locations and adjacencies of rooms within department Description of patient, staff, visitor and goods flows. Possible/recommended innovations and improvements to the clinical service model from departmental layout. Possible/recommended innovations and improvements to the FM operational policy/model from departmental layout. Approach to privacy and dignity whilst maintaining clinical need for observation. Approach at Departmental level to relevant whole hospital clinical/operational policies e.g. Infection Control, Bariatric Care, Major Incident, Radiation, Medicines Management. Immediate adjacencies to other departments/facilities. Any specified adjacencies that haven't been met with reasons and suggested alternatives The report should provide a full commentary on the drawings and make specific reference to the issues above.	Specified 1: 200 layouts (CL4.0) Supporting narrative report including diagrams as required (maximum of 30 pages).	1.70%	Have the specified adjacencies within the department been achieved? How does the layout of patient accommodation facilitate the zoning of patients into clinical groups which can respond to nursing practice, case mix, infection control, age, gender groupings etc? How do the adjacencies and layouts facilitate a multi disciplinary approach to patient care and flexibility between different staff groups? Has the bidder identified any constraints to implementing the clinical services model at department level and what are the implications?
			5.78%	
	Section 4.2: Impact on Workforce			
CL4.2.1	Observation Bidders are to provide drawings and supporting narrative to illustrate patient observation	1: 200 layouts (CL4.0) Specified patient care rooms for 1:50 layouts (see CL 4.01)	1.36%	Do the adjacencies, layouts and designs enable adequate patient observation whilst maintaining privacy and dignity and not requiring increased staffing numbers or ratios?

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>For each clinical department and for selected patient care rooms for developments to 1:50 (see CL 4.01) this should include</p> <p>Observation range from staff bases into waiting areas, patient rooms, day rooms.</p> <p>Description of staff bases in clinical areas</p> <p>Nature of visual observation eg location and size of any observation panels in doors, windows.</p> <p>Detail of nurse call system</p> <p>Innovations and improvements to observation from whole hospital layout or departmental layout or room layout</p> <p>Any specified observation requirements that can't be met with reasons and suggested alternatives</p> <p>The report should provide a full commentary on the drawings and make specific reference to the issues above. It should also include any possible constraints.</p>	Supporting narrative report including diagrams as required (maximum of 20 pages).		Are staff bases in clinical areas located and designed in a way to promote good patient observation, visibility to patients and visitors and support use for clinical administration by different groups of ward based and visiting clinical staff?
CL4.2.2	<p>Staff Flows</p> <p>Bidders are to provide drawings and supporting narrative to illustrate the staff flows.</p> <p>For the whole hospital and for each department and for selected rooms for development to 1:50 (see CL4.01) this should include</p> <p>Description of staff flows</p> <p>For the whole hospital a matrix of staff journey times between car park and entrance, entrance and departments</p> <p>For departments a matrix of journey times between entrance and the department, between different rooms within the department, between the department and staff facilities, between the department and hubs, between the department and those departments it has a key adjacency with.</p> <p>For selected rooms for 1:50 layout staff flow into, out of and within the room</p> <p>Possible/ recommended innovations and improvements to clinical staff flows from whole hospital layout or departmental layout or room layout</p> <p>Any specified journey times that can't be met with reasons and suggested alternatives</p> <p>The report should provide a full commentary on the drawings and make specific reference to estimated journey times</p>	<p>1: 200 layouts (CL4.0)</p> <p>Diagrammatic stacking plan</p> <p>Specified patient care rooms for 1:50 layouts (see CL4.01)</p> <p>Supporting narrative report including diagrams as required (maximum of 30 pages).</p>	1.02%	<p>Do the staff journey routes through the hospital, within departments and selected rooms make clinical and operational sense e.g. as direct as possible, minimal duplication of journeys, minimal journey times, etc?</p> <p>Do the adjacencies meet the the specified journey times?</p> <p>What are the journey times for key flows including emergency teams, critical care outreach team, elective teams, clinical admin, facilities staff etc?</p> <p>Is the journey from the staff car park to depts. safe 24/7?</p>
CL4.2.3	<p>Multidisciplinary Approach to Care</p> <p>Bidders are to provide a commentary on how the design supports a multi disciplinary approach to patient care throughout the whole hospital and at departmental level. Where appropriate the commentary should be supported by drawings and/or layouts.</p>	Narrative report including diagram and layouts as required (maximum of 6 pages)	0.34%	<p>Do the adjacencies and layouts facilitate a multi disciplinary approach to patient care and flexibility between different staff groups?</p> <p>Are resource bases in clinical areas located and designed in a way to promote use for clinical administration by different groups of department based and visiting clinical staff whilst restricting access to patients and visitors.</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	The commentary should also include any possible/ recommended innovations and improvements to facilitate a multi disciplinary approach to care and any possible constraints			
CL4.2.4	<p>Use of LEAN Principles/ Efficient use of Staff Time Bidders are to provide drawings and supporting narrative to illustrate how the layouts facilitate efficient use of staff time in line with LEAN principles</p> <p>For the whole hospital, for each specified department and for selected rooms for development up to 1:50 (see CL4.01) this should include How adjacencies facilitate efficient staff flows to minimise duplication of journeys and journey time Location and adjacencies of clinical admin areas What design elements are proposed to facilitate LEAN working How the design supports the use of technology to support staff in the delivery of patient care and FM services Possible recommended innovations and improvements to facilitate greater use of LEAN principles. Any constraints to the use of LEAN principles and suggested alternatives</p> <p>The report should provide a full commentary on the drawings and make specific reference to the use of LEAN principles</p>	<p>Marked up whole hospital plans at 1:500 Diagrammatic stacking plan</p> <p>1:200 layouts (CL4.0) Specified patient care rooms for 1:50 layouts (see CL4.01) Supporting narrative report including diagrams as required (maximum of 6 pages)</p>	0.34%	<p>Do the layouts and adjacencies facilitate working along LEAN principles? Eg short journey times, minimal repetition in journeys, generic and repeated design etc</p> <p>How does the design facilitate staff in delivering the service to a high standard in line with evidence practice and within the affordable workforce envelope?</p>
CL 4.2.5	<p>Staff facilities Bidders are to provide drawings and supportive narrative to illustrate provision of staff facilities For the whole hospital and for each department (ie those where 1:200 layouts are being developed CL4.0)) this should include Description of staff facilities including capacity and any demarcation from patient and visitor areas Locations of staff facilities in relation to work area including journey times</p> <p>Description of how the design of staff facilities promotes staff well being Possible/ recommended innovations and improvements to staff facilities Any constraints to meeting the specified staff facilities and suggested alternatives</p>	<p>Marked up whole hospital plans at 1:500 Diagrammatic stacking plan</p> <p>1:200 layouts (CL4.0) Supporting narrative reports including diagrams as required (maximum of 10 pages)</p>	1.02%	<p>Are there adequate staff facilities including changing areas, lockers, rest rooms, toilets, access to refreshments? Are the locations of staff facilities such that they promote efficient staff flows whilst allowing some separation from immediate work area and patients? For example are changing areas and lockers in a location that minimises journey time at the beginning and end of shifts? Do staff have an option of having breaks in an area away from the immediate workplace and patients but in sufficiently close proximity to reduce travel time during the break?</p> <p>Is the location of staff toilets separate to patient areas but in close proximity to the immediate work area so as to minimise the time away from the work area? Are staff facilities available 24/7? Are staff facilities designed in a way that promotes staff well being and value and facilitates use by different staff groups?</p>
			4.08%	
Section 4.3: Soft FM and Goods Flows				
CL4.3.1	<p>Soft FM and Goods Flows Bidders are to provide drawings and supporting narrative to illustrate the soft FM and goods flows For the whole hospital, for each department and for selected rooms for development up to 1:50 (see 4.01) this should include</p> <p>description of soft FM flows ie goods, waste and staff including receipt and distribution locations and use of lifts</p>	<p>Marked up whole hospital plans at 1:500 Diagrammatic stacking plan</p> <p>1:200 layouts (CL4.0)</p>	2.38%	<p>Are there clear dedicated routes for soft FM flows through the hospital and within departments and do these make operational sense? Are there clear dedicated routes for goods flows through the hospital, within departments and within selected rooms and do these make operational sense?</p> <p>Are there clear dedicated routes for waste flows through the hospital, within departments and do these make operational sense?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>for the whole hospital a matrix of soft FM and goods journey times between defined goods entrances and departments, between receipts and distribution area/s and departments and between different departments</p> <p>For departments a matrix of journey times between the defined goods entrances and the department, between the department and storage and disposal areas on hubs, between the departments and those departments it has a key adjacency with</p> <p>for selected rooms flows within the rooms including from entrance to storage, from storage to area of use, for waste products from area of use to exit etc</p> <p>Possible/ recommended innovations and improvements to ensure clear segregation of goods, waste and FM flows from the whole hospital layout or departmental layout</p> <p>Any specified journey times that can't be met with reasons and suggested alternatives</p> <p>The report should provide a full commentary on the drawings and make specific reference to estimated journey times</p>	<p>Specified patient care rooms for 1:50 layouts (see CL4.01)</p> <p>Supporting narrative reports including diagrams as required (maximum of 20 pages)</p>		<p>Do the adjacencies meet the specified journey times?</p> <p>What are the journey times for key goods, soft FM and waste flows and do these minimise journey times and also adopt LEAN principles?</p> <p>How does the layout allow the specified separation of flows including dedicated access points and lifts? ie goods, waste, soft FM services, staff, visitors, patients, deceased patients</p>
CL4.3.2	<p>Storage and segregation</p> <p>Bidders are to provide:</p> <p>Defined specifications, descriptions and drawings of all areas in the Receipts & Distribution department, including a clear demonstration of their key adjacencies with flow of goods from delivery yard to storage.</p> <p>Defined specifications and descriptions of all storage areas throughout the hospital inclusive of wards, theatres, departments, hubs etc, their key adjacencies, flow of goods and segregation clearly demonstrated. For specified departments (i.e. those where 1:200 layouts are being developed) this should include drawings showing storage areas and goods flows.</p> <p>Any constraint on goods flow and segregation need to be specified with suggested alternatives.</p>	<p>Marked up whole hospital plans at 1:500.</p> <p>Diagrammatic stacking plan.</p> <p>Specified 1: 200 layouts (CL4.0)</p> <p>Specified patient care rooms for 1:50 layouts (see CL4.01)</p> <p>Schedule of accommodation by department specifying storage.</p> <p>Supporting narrative report including diagrams as required (maximum of 30 pages).</p>	1.70%	<p>Is there sufficient storage space and is it designed along LEAN principles (e.g. common layout in all ward areas, top up systems)?</p>
			4.08%	
4.4 Education and Training				
CL 4.4.1	<p>Education and Training Facilities</p> <p>Bidders are to provide drawings and supporting narrative to illustrate provision of education and training facilities.</p> <p>For the whole hospital and for each department this should include:</p> <p>Description of education and training facilities including capacity</p> <p>Locations of education and training facilities in relation to work areas including journey times</p>	<p>Marked up whole hospital plans at 1:500.</p> <p>Diagrammatic stacking plan.</p> <p>1: 200 layouts (CL4.0)</p> <p>Supporting narrative report including diagrams as required (maximum of 10 pages).</p>	1.36%	<p>Is the specified education and training accommodation included in central facility; at hub level; in bespoke areas?</p> <p>Are the locations of hub and bespoke education and training facilities such that they promote efficient staff flows whilst allowing some separation from direct clinical areas and patients and are there direct communication means between these facilities and the clinical areas they serve?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	Description of how the design of education and training facilities promotes staff learning including use of technology i.e. audio visual equipment linking with theatres and seminar rooms Possible/recommended innovations and improvements to education and training facilities			Has innovative technology been used within area to provide staff learning opportunities?
CL4.4.2	Undergraduate Common Room Facilities Bidders are to provide drawing and supporting narrative to illustrate provision of a medical student common room and locker space sufficient for 180 students. This should include: Description of the common room facility, including capacity Location of the common room facility	Marked up whole hospital plans at 1:500. Diagrammatic stacking plan. Specified 1: 200 layouts for CD Stage 3 (see CL4.0). Supporting narrative report including diagrams as required (maximum of 10 pages).	0.34%	Is the common room and locker space provided adjacent the central education and training facilities? Does it provide an area for relaxation and contain welfare facilities for users?
CL4.4.3	Academic Research Bidders are to provide a drawing and supporting narrative to illustrate provision Description of the area provided Location of the base with an adjacency to the Education and Training facilities Description of how academic research has an identity both within the base and throughout the hospital Possible/recommended innovations and improvements for research bases	Marked up whole party plans at 1:500. Diagrammatic stacking plan. 1: 200 layout for academic research area Supporting narrative report including diagrams as required (maximum of 10 pages).	0.34%	Does the academic research base meet the requirements of the operational policy. Is the academic research base adjacent the education and training facilities? Does it have an identity/brand?
			2.04%	
4.5 Privacy, Dignity and Safeguarding				
CL 4.5.1	Privacy and Dignity Bidders to provide narrative and supporting drawings to illustrate approach to privacy and dignity and how this meets the Trust's MMH Privacy, Dignity and Respect Policy, legal requirements and national guidance. For the whole hospital, each department and for selected rooms for development to 1:50 (see CL4.01) this should include • Description of approach to gender separation with some practical examples for patients in all areas where patients are in a state of undress/nightwear • Description of approach, with some practical examples, to visual and audible privacy for patients in all areas whilst allowing staff observation • Possible/recommended innovations and improvements to privacy and dignity provision and in particular how to balance this with staff observation Description of approach to making all areas appropriate for use by people with dementia • Any specified privacy and dignity requirements that can't be met with reasons and suggested alternatives.	Text outlining/ summarising approach to privacy and dignity with any appropriate supporting drawings. Max 15 pages A4 1:200 layouts marked up to show privacy and dignity approach Specified patient care rooms for 1:50 layouts (see CL4.01) marked up to show privacy and dignity approach	1.36%	Does the design meet the requirements set out in the Trust's MMH Privacy, Dignity and Respect Policy? In particular Is there separation of male and female patients in all areas where patients are in a state of undress/nightwear Is there adequate visual and audible privacy for patients in all areas that is balanced with the need to maintain staff observation Is there adequate provision for patients with dementia in all areas where people with dementia are likely to attend?

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
CL 4.5.2	<p>Accessibility</p> <p>Bidders to provide narrative and supporting drawings to illustrate approach to access & equality and how this meets the Trust's MMH Access Policy, legal requirements and national guidance.</p> <p>For the whole hospital, for each department and for selected rooms for development to 1:50 (see CL4.01) this should include</p> <p>Description of approach to access and equality with some practical examples</p> <p>Description of approach to way finding</p> <p>Description of approach to creating children friendly/appropriate areas across the hospital</p> <p>Description of evacuation routes in relation to accessibility</p> <p>Description of approach to enabling people using motorised mobility aids to safely self navigate into and around the building</p> <p>Possible/recommended innovations and improvements to accessibility & equality</p> <p>Any specified access and equality requirements that can't be met with reasons and suggested alternatives</p>	<p>Marked up whole hospital plans at 1:500 showing approach to accessibility & equality including evacuation routes.</p> <p>Text outlining/ summarising approach to accessibility with any appropriate supporting drawings: max.15 pages A4.</p> <p>1:200 layouts marked up to show privacy and dignity approach(CL4.0)</p> <p>Specified patient care rooms for 1:50 layouts (see CL4.01) marked up to show privacy and dignity approach</p>	1.36%	<p>Does the design meet the requirements set out in the MMH Access Policy? In particular</p> <p>Does it take account of the Equality Act requirements for provision for people within the recognised Equality and Diversity strands?</p> <p>Clear, easy to follow way finding</p> <p>Does it take account of other legal requirements relating to access and facilities?</p> <p>Ability for people using motorised mobility aids (e.g. wheelchairs & mobility scooters) to safely self-navigate into and around the building (in line with the policy)</p> <p>Clear, safe, accessible to all evacuation routes in an emergency</p> <p>Is there adequate provision for patients that are children in all clinical areas where children are likely to attend in terms of privacy, dignity and safeguarding?</p>
CL 4.5.3	<p>Visitor Facilities</p> <p>Bidders to provide narrative and supporting drawings to illustrate facilities for visitors.</p>	<p>Marked up whole hospital plans at 1:500 showing visitor facilities.</p> <p>Specified 1: 200 layouts showing visitor facilities. (CL4.0)</p> <p>Supporting narrative report describing visitor facilities (max. 10 pages A4).</p>	0.34%	<p>Are there adequate facilities for visitors especially in inpatient areas:</p> <p>Chairs & storage for these</p> <p>Near access to toilets</p> <p>Private areas for breaking bad news</p> <p>Overnight facilities and do these maintain privacy, dignity and security for visitors</p>
				3.06%
4.6 Future Proofing				
CL 4.6.1	<p>Opportunities and recommendations for innovations and improvements</p> <p>Bidders are to provide narrative and where appropriate supporting drawings that identify opportunities for innovation and improvement (including from analysis of the clinical service model, clinical design brief (PP&DDs/operational policies) and Public Sector Comparator) at both whole hospital & departmental level.</p>	<p>Text outlining/ summarising opportunities & recommendations with any appropriate supporting drawings: max. 10 pages A4.</p>	0.68%	<p>Have any opportunities been identified & if so</p> <p>What are these?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	The text needs to identify the benefits these innovations and improvements will deliver in terms of clinical care, patient experience and efficiency along with the likely costs and feasibility. Bidders are asked to recommend/prioritise the identified innovations and improvements along with their basis for prioritisation.			<p>What benefit do they add?</p> <p>Which opportunities have been recommended & are: These achievable</p> <p>Do they add benefit to clinical care, patient experience or workforce efficiency Have they got an additional cost & is this specified?</p>
CL 4.6.2	<p>Expansion and contraction</p> <p>Bidders are to provide narrative and supporting diagrams to show for the whole hospital and for each department</p> <ul style="list-style-type: none"> • Approach to expansion and contraction of clinical areas. • Approach to expansion and contraction of non clinical areas. <p>Narrative to include:</p> <ul style="list-style-type: none"> • Cost and time implications of expansion and contraction approach • Ease of delivery e.g. level of disruption to adjacent departments and/or whole hospital. 	<p>Marked up whole hospital plans at 1:500 showing expansion space and approach to contraction.</p> <p>1: 200 layouts (CL4.0) marked up to show expansion space and approach to contraction. Text outlining approach to expansion and contraction - summarising opportunities and recommendations with any appropriate supporting drawings max 10 pages A4</p>	1.02%	<p>Are there expansion plans? What are the time and cost implications of these?</p> <p>What additional capacity do these create?</p> <p>What is the likely disruption to adjacent departments and the whole hospital?</p> <p>Are the expansion opportunities for bespoke areas (ED, theatres, Imaging, critical care, neonates, delivery suite etc) adjacent to these areas?</p> <p>Are the expansion opportunities for bespoke areas (ED, theatres, Imaging, critical care, neonates, delivery suite etc) adjacent to these areas?</p> <p>Are there reduction plans?</p> <p>What alternative use can released space be used for?</p>
CL4.6.3	<p>Change in use</p> <p>Bidders are to provide narrative and any appropriate supporting diagrams to show how the functionality of areas can be easily changed on a temporary or permanent basis to include at least</p> <ul style="list-style-type: none"> additional critical care beds additional operating theatres & recovery beds additional adult ward/bed capacity additional body storage 	<p>Text outlining approach to change in use with any appropriate supporting drawings max 10 pages A4</p>	0.68%	<p>Can the functionality of areas be easily changed on a temporary basis?</p> <p>What are the time and cost implications of this?</p> <p>Can the functionality of areas be easily changed on a permanent basis? What are the time and cost implications of this?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>additional ED capacity including separate but colocated urgent care facility</p> <p>additional imaging capacity</p> <p>adult outpatient department</p> <p>Narrative to include: cost and time implications of change to functionality</p> <p>Ease of delivery, eg level of disruption to departments and/or whole hospital</p>			
CL 4.6.4	<p>Introduction of New Technology</p> <p>Bidders are to provide narrative and any appropriate supporting diagrams to show how new technology can be introduced. To include at least:</p> <p>use of robotics to move goods between FM areas and departments</p> <p>new cleaning and decontamination technology</p> <p>advances in operating technology e.g. laproscopic or robotic surgery</p> <p>new Imaging/diagnostic technology</p> <p>Narrative to include:</p> <p>cost and time implications of introducing new technology and adapting the building to support this</p> <p>ease of delivery e.g. level of disruption to departments and/or whole hospital.</p> <p>ease of delivery e.g. level of disruption to departments and/or whole hospital.</p>	<p>Text outlining approach to introduction of new technology: max. 10 pages A4.</p> <p>Marked up floor plans at 1:500 to show potential use of technology including robotics to move goods and marked up 1:200 drawings for appropriate departments to include operating theatres and imaging.</p>	0.68%	<p>How can new technology be introduced if and when this becomes available (e.g. advancements in robotic and laproscopic surgery, new cleaning technologies etc)?</p> <p>What are the time and cost implications of this?</p>
			3.06%	
4.7 Infection Control				
CL4.7.1	<p>Infection control</p> <p>Bidders to provide narrative and supporting drawings to illustrate approach to infection control and how this meets the Trust's MMH Infection Control Policy, legal requirements and national guidance. To include:</p>	Text outlining approach to infection control: max. 20 pages A4.	1.70%	Does the design meet the requirements set out in the Trust's Infection Control Policy and the specific infection control requirements for individual departments?

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	Possible/recommended innovations and improvements in relation to infection control Any specified infection control requirements that can't be met with reasons and suggested alternatives.	Marked up 1: 200 layouts and for specified patient care rooms for 1:50 layouts (see CL4.01) showing separation of clean and dirty flows, hand hygiene provision, storage.		Including: hand hygiene decontamination deep cleaning with no/minimal disruption to clinical services separation of clean and dirty flows within departments storage arrangements
CL4.7.2	Isolation Bidders to provide a narrative: confirming the number of single rooms per inpatient ward/dept. describing number of, location and clustering of isolation facilities (to also be summarised in a matrix). possible/recommended innovations and improvements in relation to isolation facilities any specified isolation requirements that can't be met with reasons and suggested alternatives.	Schedule of Accommodation Text describing isolation facilities including the number of single rooms, number, location and clustering of isolation facilities: max. 4 pages A4. Marked up 1: 200 layouts showing isolation rooms.	0.68%	Does the number and % of single rooms meet the design brief for the whole hospitals Is there the specified number of isolation rooms? Are the isolation rooms in the specified locations? In the 1:200s layouts are the isolation rooms clustered in line with the design brief requirement?
CL4.7.3	Infectious outbreaks Bidders to provide narrative and supporting drawings to illustrate how inpatient depts. can have areas designated for cohort nursing in the event of an infectious outbreak	Marked up 1: 200 layouts showing how areas within the department can be designated for co-hort nursing. Supporting narrative (max. of 10 pages A4)	0.68%	Ability to manage infection outbreaks with minimal disruption to clinical services e.g. via to co-horting patients & ability to decontaminate areas.
				3.06%
4.8 Health Care Planning				
CL4.8.1	Schedule of Accommodation Bidders to provide a schedule of accommodation by department for the facility and to highlight any areas of deviation from the Trust's Brief along with reasons for deviation.	Schedule of Accommodation Spreadsheet	1.36%	Do the proposed gross floor areas, departmental floor areas, room areas and allowances compare favourably with the schedule of accommodation issued?
CL4.8.2	Functional Content Bidders to provide functional content with as drawn areas per department shown against the Trust's brief and to highlight any areas of deviation from the Trust's Brief along with reasons for deviation.	1:500 whole hospital drawings & Schedule of Accommodation Spreadsheet	1.02%	Do the drawn areas reconcile with the schedule of accommodation issued? How do the drawn areas compare to the drawn areas in the Trust's ADR?
				2.38%
4.9 Moving and Handling / Ergonomics				
CL4.9.1	Ergonomics Bidders to provide a narrative and supporting appropriate diagrams to illustrate the approach to ergonomics. To include: possible/recommended innovations and improvements in relation to ergonomics any specified ergonomic requirements that can't be met with reasons and suggested alternatives.	Text describing approach to ergonomics: max. 20 pages A4. Marked up 1: 200 layouts (CL4.0) and for specified patient care rooms for 1:50 layouts (see CL4.01) showing approach to ergonomics.	1.36%	Does the design meet the requirements set out in the Trust's Ergonomics Policy? Does the design provide layouts that are ergonomically sound? Including appropriate use of hoists; space around beds; turning circles; desk heights, space for movement of bariatric patients etc.

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	For departments and for selected rooms for development to 1:50 (see CL4.01) bidders to show on departmental layout and in supporting narrative approach to ergonomics including ability to use hoists, space around beds, turning circles, bariatric provision and space for movement of bariatric patients, location of reception desks etc.			
CL4.9.2	<p>Bariatric provision Bidders to provide: A schedule of accommodation for the whole facility by department describing location and quantity of bariatric provision in line with Trust's design brief criteria</p> <p>For specified departments and for selected rooms for development to 1:50 (see CL4.01) bidders to show on departmental and room layout location and quantity of bariatric facilities along with entrance and exit routes to the facility including space for movement of bariatric patients.</p> <p>A narrative and supporting appropriate diagrams to illustrate the approach to bariatric provision. To include:</p> <p>patient pathways/flows for bariatric people through the facility as emergency patients, elective patients, maternity patients, day cases, deceased patients and visitors</p> <p>possible/recommended innovations and improvements in relation to bariatric provision</p> <p>any specified bariatric provision requirements that can't be met with reasons and suggested alternatives.</p>	<p>Text describing approach to bariatric provision: max. 20 pages A4.</p> <p>Schedule of Accommodation spreadsheet describing location and quantity of bariatric provision</p> <p>Marked up whole hospital plans at 1:500 showing location and quantity of bariatric provision and bariatric flows through the facility.</p> <p>Marked up 1: 200 layouts Specified patient care rooms for 1: 50 layouts (see CL401) showing bariatric provision.</p>	1.02%	<p>Does the design meet the requirements for bariatric provision set out in the MMH Bariatric Policy? Including:</p> <p>specified weight thresholds for all areas number and location of bariatric rooms</p>
			2.38%	
4.10 Business Continuity				
CL4.10.1	<p>Continuity Plan Bidders to provide a contingency/business continuity plan to describe the proposed contingencies within the building design/construction that will ensure resilience and business continuity for the whole hospital and each department (i.e. those where 1:200 layouts are being developed). This needs to include as a minimum the following scenarios: surge in emergency activity infection control outbreaks</p> <p>routine maintenance</p> <p>failure of utilities essential to clinical service delivery</p>	Text outlining Contingency/Business Continuity Plan with any appropriate supporting drawings: max. 6 pages A4.	1.70%	<p>Can temporary increase in capacity and change in use for designated areas be implemented quickly?</p> <p>Can infection outbreaks be managed in a localised way that allows the majority of the rest of the hospital to function as normal? Can required annual maintenance of the facility/fixed equipment be undertaken without disruption to clinical and operational services?</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
				Are there clear resilience and continuity plans for key utilities (heat, light, electricity, medical gases, water) that are essential for safe clinical service delivery and do these plans allow clinical services to continue to function with minimal disruption in the event of a utility failure?
CL4.10.2	Major incident plan Bidders to provide a narrative and supporting drawings to show how the proposed building design would enable the Trust to respond to a major incident and implement its Major Incident Plan.	Marked up whole hospital plans at 1:500 and for appropriate departments (including at a minimum car parks, entrances/atrium, critical care, operating theatres, ED and Imaging) marked up floor plans at 1:200 showing key areas and flows (including evacuation routes in a major incident) Text outlining approach to building use in a Major Incident with any appropriate supporting drawings: max. 4 pages A4.	0.68%	Can the Trust's Major Incident Plan be implemented? i.e. location of control rooms, alternative use of designated areas, lock down of areas and site, separation of flows? Are there clear evacuation routes that are clinically appropriate and feasible?
			2.38%	
4.11 Outline Commissioning Plan				
CL 4.11.1	Commissioning statement Bidders are to provide a Commissioning Statement including response to Trust's Outline Commissioning Plan response to Trust's requirement for Beneficial Access Bidder's approach to commissioning and process for working with Trust to develop final commissioning plan including bidder lead and team Identification of any constraints, suggestions for improvement and related costs.	A4 sized document, maximum of 20 sides.	1.70%	Can the bidder meet the Trust's Outline Commissioning Plan and are any constraints or improvements identified? Can/does the bidder agree to provide beneficial access? How well developed is the bidder's plan for developing the next stage of the commissioning plan?
			1.70%	
Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	Final Tender Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning			
	Heading			

Competitive Dialogue (CD) Estates & Technical

Bidder outputs for all stages to conform to the following formats:
Text in Microsoft Word.
Spreadsheets in Microsoft Excel.
Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p align="center">CD Stage 4: Design Deliverables Part 2 Competitive Dialogue</p> <p align="center">The following outputs are requested from the Bidders to assist evaluation of design solutions:</p>			
	Section 4.1: Capital Costs			
ET4.1.1	Elemental cost plan. Gross Floor Area to match that of the submitted 1:200 and 1:50 drawings. Separate sub-element analyses for M&E services, External Works and Professional Fees. To be supported by elemental analysis sheets show the principal quantities and rates comprising the elemental and sub-elemental values.	Formal report using the cost pro-forma. Cost Plan pro-forma C1-5.	1.44%	<p>How sufficient are the cost plan and elemental analysis sheets in terms of extent, completeness and format to enable the evaluation to be completed</p> <p>How well does the elemental breakdown of the Cost plan match benchmarking data to demonstrate costs are allocated to all elements in a transparent way and demonstrate value for money</p> <p>How well does the cost plan compare in the same format as the OB forms and does it give a comparable ratio of elemental costs as contained in the OB forms and are cost consistent with the design</p> <p>How well does the gross floor area contained in the Cost plan reconcile with 1:500 and 1:200 drawings(CL4.0) issued as part of CD Stage 4</p> <p>Are allowances for inflation realistic and appropriate</p>
ET4.1.2	<p>Risk register: A costed risk register showing risks, probabilities, impact, risk owner and proposed mitigation measures. The risk register shall provide a demonstrable link to the contingency contained within the elemental cost plan.</p> <p>The risk register should take account of the design, construction, commissioning, handover and operational phases of the project.</p>	Formal report using spreadsheet	0.18%	<p>How sufficient is the risk register in terms of extent, completeness and format to enable the evaluation to be completed</p> <p>How effective are the risk mitigation strategies and do they demonstrate a link with the contingency</p> <p>How well are risks expressed in the register in a transparent way which shows robust links with the Project Programme</p> <p>How well does the risk register propose realistic mitigation measures</p>

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	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
				How well does the risk register show consistency with the Project Agreement
ET4.1.3	Cash flow forecast related to design and construction programmes. To be presented in financial years (with half-yearly figures shown).	Formal report using spreadsheet	0.18%	How sufficient Is the cash flow forecast in terms of extent, completeness and format to enable the evaluation to be completed How well does the forecast compare with industry norms and benchmarking data
ET4.1.4	FB Forms (using the same methodology as the DCA and On-Cost method within the Design Brief costs).	Standard NHS FBC Forms 1-4 WITH On-Costs linked to Cost Plan.	0.18%	How well do the FB forms correlate with to OB Forms
ET4.1.5	Lifecycle Cost Model: in elemental format (with capex items, quantities and rates linked to the Elemental Cost Plan) showing the replacement cycles and proportions replaced for each year of the Concession Period. For M & E services, this shall be in sub-elemental format to match the capex Cost Plan and shall include itemised plant and equipment. To be produced in both Discounted and Non-Discounted format, with and without smoothing. Outputs shall provide a demonstrable link to the overall financial model.	Formal report using spreadsheet.	1.08%	How sufficient Is the lifecycle cost model in terms of extent, completeness and format to enable the evaluation to be completed How well does the lifecycle cost model comply with the lifecycle requirements of Schedule 8 How well does the lifecycle cost model limit the impact on the overall unitary charge How well does the lifecycle cost model link to the overall financial model
ET4.1.6	Lifecycle Cost Report: To demonstrate how assessments of optimising Whole Life Cost (i.e. achieving optimum value in terms of capex, lifecycle cost and FM costs) have been reflected into the design proposals.	Formal report	0.36%	To what extent have the Bidders demonstrated design solutions that optimize whole life costs
ET4.1.7	Statement of cost exclusions and assumptions: All exclusions and assumptions shall be clearly stated. Any items not specifically stipulated as exclusions or assumptions at this stage will be deemed to have been included in the bidders' proposals and costs.	Formal report	0.18%	How sufficient is the exclusions and assumptions register in terms of extent, completeness and format to enable the evaluation to be completed To what extent are the exclusions and assumptions contained in the risk register To what extent are mitigation measures proposed for each exclusion and assumption

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Estates and Technical Bid Deliverables

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Entrances;</p> <p>Egresses;</p> <p>Window positions.</p> <p>For comparison, all room sizes are to be measured to the internal face of the wall. Overall department sizes to the inside face of the external wall.</p> <p>Control of infection and decontamination proposals.</p>	Written report including sketches and specifications (maximum 30 sides A3)		<p>How well do the internal room layouts and sizes compare favourably with the generic rooms contained in the Trust Brief</p> <p>How well are the room configurations coordinated with the structural frame of the building</p> <p>How well does the design comply with the Trust Brief in terms of technical solutions to address healthcare acquired infection to include hand washing specifications, room layouts, the layout of clean and dirty utility rooms and the proposals for isolation rooms etc.</p>
ET4.3.3	<p>1:50 room layout plans (CL4.01)</p> <p>Bidders should illustrate the adaptability of their design solutions to meet a change in functionality.</p> <p>Bidders should illustrate how their bids deviate from the Functional Brief and SoA.</p>	1:50 Plans and Elevations extracted from the Building Information Model	0.14%	<p>How well do the 1:50 drawings comply with the requirements of Schedule 8 part 3, the Functional Brief and the PPDDs</p>
ET4.3.4	<p>Room Data Sheets for all rooms</p> <p>Room data sheets should have a specific room identity number which correlates to the layout plans</p>	Room data sheets in ADB format extracted from the Building Information Model	0.24%	<p>How well do the room data sheets comply with the Trust's requirements of Schedules to the Project Agreement</p>
ET4.3.5	<p>Reflected ceiling plans for key departments indicating ceiling types, setting out and ceiling heights. The reflected ceiling plans need to cover the following departments:</p> <p>Emergency Department;</p> <p>Ward Cluster;</p> <p>Integrated Critical Care;</p> <p>Maternity Delivery Suite;</p> <p>Neo-Natal Unit;</p> <p>Operating Theatres;</p> <p>In addition to the ceiling type and height, these plans need to show lighting proposals, CCTV locations, smoke detection sensors, hoists and all other ceiling mounted/fixed elements.</p>	1:100 plans.	0.24%	<p>How well are ceiling finishes coordinated across the departments including bulkheads</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
ET4.3.6	<p>Elevations and sections; including courtyard elevations and Atria.</p> <p>Bidders are to provide 1:200 Sections and Elevations to clearly demonstrate the build up and form of the scheme. These are to clearly identify structural and finished storey heights, height of overall buildings and plant spaces on roof areas.</p> <p>The elevations must cover all elevations around the outside of the building and also the internal courtyards. Where applicable, the sections must be contextualised with any surrounding buildings and any site topography.</p> <p>Elevations must demonstrate the finishes and colours.</p> <p>All sections and elevations are to indicate structural grids.</p> <p>Bidders should provide structural layouts and sections through the building.</p>	1:100 and 1:200 drawings	0.48%	<p>How well do the proposals demonstrate that the design has been developed to a level where it can be built without further development</p> <p>How well do the proposals enhance the natural lighting of lower floors</p> <p>How well will the elevation weather over time and have materials that have been selected that are appropriate</p> <p>How well is the maintenance strategy coordinated with access and materials section</p>
ET4.3.7	<p>Interior design and way finding proposals.</p> <p>Provide 1:200 plans for all departments:</p> <p>These must cover the following:</p> <p>Floor finishes;</p> <p>Wall finishes;</p> <p>Integrated arts;</p> <p>Door types & ironmongery;</p> <p>Wall protection;</p> <p>Lighting proposals;</p> <p>CCTV locations;</p> <p>Door entry locations.</p>	<p>written report with illustrations, including commentary design development to reflect strategy</p> <p>1:200 drawings</p> <p>Finishes board including sample components</p>	0.14%	<p>How well can visitors find their way within the building without the need for direction signs</p> <p>How well do the proposed finishes for the specified areas create an environment which complies with the Trust Brief</p> <p>How well does the interior design coordinate with the way finding proposals and coordinate with the engineering proposals in terms of ergonomic positioning of alarm panels etc.</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	In addition to the finishes drawings, bidders are to provide a strategic written & illustrated document describing how they intend to define the way finding throughout the building both internally and externally. This strategy needs to set out the proposed key Trust interfaces and methodology for including stakeholder groups.	Written report including drawings as required (maximum 20 sides A3)		
ET4.3.8	<p>Landscaping.</p> <p>Prepare a detailed landscaping solution.</p> <p>This needs to highlight the green planted spaces and the hard landscaped areas indicating links between inside and outside including the use of courtyards. This should illustrate how secure by design is considered as part of the landscaping and how spaces are to be accessed and used by patients, staff and visitors. The external and internal landscaped areas are to be considered in terms of public and private spaces.</p> <p>Bidders are to provide a detailed breakdown of proposed finishes, planting and street furniture. Designs must reflect how they will encourage environmental diversity and promote the ethos of sustainability within the scheme as a whole.</p>	<p>Site plans 1:500/1:1250. 1:200 plans of courtyard areas and key 1:50 detail plans</p> <p>Written report including proposed planting and street furniture to be provided including illustrations. (maximum 30 sides A3)</p>	0.24%	<p>How well does the proposal fit with the Sandwell Metropolitan Borough Council master plan</p> <p>How well does proposal respond to secure by design</p> <p>How well does the proposal enhance the design of the building</p> <p>How well does the proposal fit with the Trust Brief for vehicle and pedestrian access across the site</p> <p>To what extent are the proposals low maintenance</p> <p>How sustainable are the proposals</p> <p>To what extent do bidders provide a range of planting and trees of with a variety of types and maturity e.g 5, 10 and 15 years.</p>
ET4.3.9	<p>Typical construction details:</p> <p>Bidders are to provide detailed sections through the building at key interfaces. These should be at a scale of 1:20 to demonstrate proposed construction methodology and materials. These need to clearly define wall build ups and levels from floor to floor. The number of sections required will vary from bidder to bidder. However it is envisaged that the number will need to cover all major façade interfaces and build ups and is likely to be circa 30 sections.</p> <p>Bidders are to provide details of structural connection</p>	1:20 Sections	0.48%	<p>How well do the proposals demonstrates that the design has been developed to a level where it can be built without further development</p> <p>How well do the proposals support adaptable and flexible design</p> <p>How well do the proposals support off site manufacture and construction programme constraints</p> <p>How well do the proposals coordinate with the proposed sustainability strategy</p>
ET4.3.10	<p>Adaptability of space and expansion strategy:</p> <p>Bidders are to show how their proposals can be expanded to provide additional hospital accommodation.</p>	Drawings at 1:1250; 1:500 and 1:200.	0.24%	How well will the design allow expansion without affecting hospital services

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	These will need to be demonstrated at a high level in block format and demonstrate the impacts to the overall site, traffic flows and main entrances/deliveries. In addition to the high level bidders will have to focus on specific areas at 1:200. The bidders will be expected to demonstrate the expansion of an additional ward cluster with neighbourhood hub,1 operating theatre, maternity facilities, a generic outpatients pod and imaging facilities together with indicative costs.	Indicative cost plan		How well do the proposals demonstrate compliance with the requirements of the Trust-Brief How well would the proposals allow the hospital to continue to function for the period of any works
ET4.3.11	<p>Fire and Evacuation strategy</p> <p>A fully coordinated fire safety strategy</p> <p>In addition bidders will need to demonstrate full fire compartmentation & sub-compartmentation including statutory escape signage, hazard rooms and door hold open devices/strategy.</p> <p>Written documentation to explain any fire strategy and engineered solutions is required to compliment the drawings.</p>	<p>Written report with drawings (maximum 30 sides A3)</p> <p>1:500 and 1:200 layouts and elevations of all internal areas</p> <p>1:1250 site plans</p>	0.24%	<p>How well are the proposals coordinated into a fire engineered solution</p> <p>To what extent has the fire strategy been accepted by the Local Authority Building Control/Fire Service</p> <p>How well does the design support progressive horizontal evacuation and allow continued care without the need for vertical evacuation</p> <p>To what extent are fire lifts (if installed) available for use by general traffic</p> <p>How well does the design allow the Trust to develop procedures for the management of a fire alarm activation</p>
ET4.3.12	<p>Acoustic strategy</p> <p>Bidders are required to provide a written acoustic strategy to demonstrate the compliance of the Brief including the damping of structural vibration from plant and equipment</p> <p>This information must be supplemented by proposed wall build ups 1:20 drawings and marked up 1:200 wall type/performance drawings.</p>	<p>Written report including diagrams /drawings as required (max 20 sides A4).</p> <p>1:20/1:200 drawings.</p>	0.24%	How well do the proposals comply with the requirements of the Trust Brief
ET4.3.13	<p>Schedule of Finishes</p> <p>Schedule of components;</p> <p>Schedule of fixtures;</p>	<p>Written report including drawings and schedules of finishes (maximum 30 sides A3)</p> <p>Finishes boards including samples</p>	0.48%	How well do the finishes comply with the requirements of the Trust Brief

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	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Matrix of finishes protection;</p> <p>Sample finishes boards for internal finishes;</p> <p>Sample finishes boards for external envelope and roof;</p> <p>Sample finishes boards for hard landscaping and public realm;</p> <p>Matrix of corridor and circulation minimum dimensions.</p>			<p>How well do the finishes minimise maintenance</p> <p>How suitable are the finishes for persons with disabilities</p>
ET4.3.14	<p>Reports on discussions with statutory bodies (e.g. highways).</p> <p>Bidders to provide documentary evidence on discussions with local authority:</p> <p>Fire department; Building control; Environmental agency; British Waterways Highways Agency</p>	A4 written report to include illustration of meetings/engagements and short report to cover any issues raised and solutions to closure.	0.24%	The extent to which the proposals are accepted by the Statutory Bodies without caveats
ET4.3.15	<p>Sustainability strategy</p> <p>Bidders are to provide a written document to enhance the drawn information to explain their approach to sustainability and the incorporated design strategy. This will compliment information provided in the Engineering bid deliverables.</p>	<p>Written report (maximum 20 sides A4).</p> <p>Expected air permeability rate</p> <p>Expected BREEAM score</p>	0.14%	<p>How well do the proposals meet the requirements of BREEAM</p> <p>How well does the building orientation reduce and quantify the energy usage of the building in terms of solar gain in summer and thermal gain in winter</p> <p>To what extent are recycled, low hazard and low carbon footprint materials specified in the construction of the building</p> <p>The extent to which risk assessments and method statements associated with land remediation are specific to the site</p> <p>The extent to which Bidders can contain and manage hazardous waste specific to the site</p>
ET4.3.16	<p>Draft environmental impact statement.</p> <p>Bidders are to provide a written document demonstrating the environmental impact of their proposals on the site.</p> <p>Bidders are required to provide geotechnical site investigation information, foundation design and structural frame solutions.</p>	<p>Written report including drawings and calculations. (maximum 50 sides A3).</p> <p>Expected BREEAM score</p>	0.29%	<p>How deliverable are the proposals in terms of geotechnical evidence and what evidence is provided to support the bid proposals</p> <p>How detailed is the environmental impact statement to identify risks and mitigation proposals</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>This is to include information on:</p> <p>Ecological enhancements;</p> <p>The effects/impact on the neighbouring waterways;</p> <p>Control and management of hazardous waste;</p> <p>Land remediation.</p>			
ET4.3.17	<p>FM Design Principles:</p> <p>Demonstrate how design will accommodate the requirements of FM services specifications contained within Schedule 14 (service level specification);</p> <p>Evidence that service providers are inputting into the design solutions now and going forward in respect of the FM service provision;</p> <p>Provide a schedule of accommodation for all schedule 14 (service level specifications) services.</p>	<p>Written report (maximum 5 sides A4)</p> <p>SoA Spreadsheet of FM areas</p>	0.29%	<p>To what extent do departments provide services in zones or rooms to allow areas of the department to be shut without affecting the whole department</p> <p>To what extent will the design reduce disruption of hard FM maintenance</p> <p>To what extent is the design compatible with BIM asset management in the operational phase of the project</p> <p>How easily cleaned is the building</p> <p>How well do the proposals demonstrate that all service providers, including the Trust's soft FM have inputted to the solution</p> <p>To what extent does the Proposed schedule of accommodation compare with the schedule of accommodation contained in Schedule 8 part 3</p>
			4.80%	
	Section 4.4: Town Planning			
ET4.4.1	<p>Evidence of planning support</p> <p>Bidders are to provide confirmation of discussions with the local authority to a more detailed development level on the scheme offering 'in principal' support of their proposals.</p> <p>The presented evidence must provide firm and unambiguous proof of dialogue and design information so as to provide realistic expectation of a successful planning application after the selection of a preferred bidder.</p>	<p>Provision of support letter or written report from local planning authority confirming 'in principle' support for the scheme.</p> <p>Confirmation of timescales for full planning and judicial review in line with TCPA.</p>	1.20%	<p>The extent to which the proposals are accepted by SMBC Town Planning without caveats</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Bidders must illustrate their response to</p> <p>1) the Outline Planning Application (OPA) conditions and Section 106 agreement</p> <p>2) Landscaping proposals and illustrations of proposed boundary and canal side treatments. These should include: Canal elevations; Grove Street; Grove Lane; London Street;</p> <p>3) Renewable energy technology proposals: Statement of compliance with Planning Authority requirements and acceptance of the technology on the site for the proposed renewable energy technologies.</p> <p>4) Draft town planning submission: To include Design and Access statements, plans, site plans, elevations and 3D visualisations of sufficient quality so as to garner the support of the local planning authority. In addition various written documentation including environmental impact assessments, travel documentation and any ecological reports will have to be established in draft ahead of a submission in accordance with the requirements of the local authority complete with illustration of the local authority comfort with the submission.</p>			
			1.20%	
	Section 4.5: Engineering			
ET4.5.1	<p>Engineering services design philosophy to include:</p> <p>Detailed description of the proposals for all engineering systems including elements required to achieve the target BREEAM Healthcare Excellent Score under ENE01 , Planning Authority requirements and energy target compliance;</p> <p>Detailed appraisal to show environmental performance and how occupant comfort levels will be achieved</p>	Written report including schedule drawings and calculations. (maximum 50 sides A3)	0.96%	<p>To what extent has the bidder expanded on the evidence provided previously to show development of the proposals and substantiation to support compliance.</p> <p>To what extent has the bidder proven compliance with Schedule 8 Part 3 and demonstrate the steps taken to ensure occupant comfort levels are achieved. All supporting calculations shall be made available and annotated as necessary.</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Schedule of proposed plant and equipment suppliers indicating specific model or range to enable an assessment to be made of the quality of the proposed equipment. The schedule shall provide life cycle information and any specialist abnormal maintenance requirements;</p> <p>Compliance statement for Building Regulations relevant to the engineering systems installations;</p> <p>Evidence of consultation with the Environment Agency regarding emissions from the facility and integration of renewable energy technologies if the technology relies on use of certain natural resources;</p> <p>Description detailing opportunities in delivering and future maintenance of the engineering installations in an efficient and safe manner without effecting business operation; Detail the approach to standardisation of the design and system selection</p> <p>Submit a strategy detailing water conservation techniques as part of the design solution</p>			How well do the proposals allow patients to control temperatures within their own bed space
ET4.5.2	<p>Services infrastructure plans of the site at 1:1000 and 1:500 scale show:</p> <p>All new and existing services whether owned by Statutory Authorities or installed as domestic site supplies; Proposals for diversion of services and effect on existing facilities both pre and post construction.</p>	A1 sized layouts and proposed Implementation plan in A3 format detailing and phased work.	0.19%	<p>How well do the Bidder's proposals allow the Trust to maintain its operational requirements as specified in the PPDDs</p> <p>How well have the proposals been planned including site specific risk assessments and method statements</p>
ET4.5.3	<p>Utilities supplies report including:</p> <p>Confirmation of required capacity, maximum demand, availability and necessary infrastructure improvements for Statutory Authority supplies;</p> <p>Description of disconnection works associated with redundant supplies.</p>	Written report including drawings and calculations. (maximum 50 sides A3)	0.10%	How well do the calculations for the anticipated supply and demand comply with the requirements of Schedule 8 part 3

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
ET4.5.4	1:200 and 1:50 scale plans providing sufficient detail of the service risers, ducts and service routes to explain the distribution of the engineering services. These layouts shall also detail how space for spare capacity is being achieved and future flexibility.	A1 sized layouts.	0.19%	How well do the proposals demonstrate compliance with the requirements of Schedule 8 parts 3
ET4.5.5	<p>Layouts for all services within the specific departments to be selected by the Trust during bid development (CL4.0). Layouts to be fully co-ordinated with the architectural room loaded drawings submitted and to indicate:</p> <p>1:200 scale co-ordinated services routing throughout the department with 1:50 scale cross-sections through "pinch points" including details of the structural frame and slabs;</p> <p>Sizing of services distribution and containment;</p> <p>Lighting layouts with supporting calculations for each room and a schedule of proposed luminaries;</p> <p>Co-ordinated reflected ceiling plans showing all M&E systems terminal devices, ceiling grid and type, ceiling height, access panels, fixed clinical equipment including supports penetrating the ceiling;</p> <p>Key notes on continuation of services outside of the department where not shown on 1:200 scale plans noted in section D3.4.4, i.e. routes and termination provisions for MRI helium quench pipes and fume cupboard ducts etc.</p>	A1 sized layouts.	0.19%	<p>How well are the M&E services and associated service ducts and risers integrated with the overall building design</p> <p>How well are each of the M&E services coordinated</p> <p>How well are the M&E services coordinated with the ceiling grid</p> <p>Ease of maintenance access and services routing to avoid access via clinical spaces where possible.</p>
ET4.5.6	<p>Plant space layouts and sections at 1:100 scale indicating:</p> <p>Plant sizes and locations;</p> <p>Principle distribution routes;</p> <p>Maintenance access requirements for items of plant and distribution systems;</p> <p>Fire escape routes;</p> <p>Separation of permit to work areas;</p>	A1 sized layouts.	0.10%	<p>To what extent does the M&E design and configuration demonstrate compliance with the requirements of these bid deliverables for this criterion</p> <p>How well M&E services segregated from the users of the hospital</p>

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	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Operational noise target for each plant space and predicted noise level outside each plant space covering external environment and internal neighbouring spaces;</p> <p>Allocation of air intake and exhaust louvers;</p> <p>Prediction of lower and upper air temperatures for each plant space;</p> <p>Provision of bunds for designated water storage areas and proposed protection against flooding in all plant spaces;</p> <p>Access strategy for each space including transporting replacement and redundant plant and negotiating changes in floor levels.</p>			How well do the proposals demonstrate compliance with the requirements of Schedule 8 parts 3 and 7
ET4.5.7	Schematics for all systems detailing plant, primary distribution systems and associated controls and alarms.	A1 sized layouts.	0.10%	How well do the proposals demonstrate compliance with the requirements of Schedule 8 parts 3 and 7
ET4.5.8	Plant schedules and initial system sizing calculations, where appropriate to support plant selections.	Written report including drawings and calculations. (maximum 50 sides A3)	0.34%	How well do the proposals demonstrate compliance with the requirements of Schedule 8 parts 3 and 7
ET4.5.9	<p>Room Data Sheets to incorporate:</p> <p>Proposed environmental conditions to be maintained;</p> <p>Lighting systems emergency standby provision;</p> <p>Provision of medical and laboratory gases;</p> <p>Provision of patient and staff alarms:</p> <p>Advice on surface and domestic water maximum temperatures;</p> <p>Provision of specialist water supplies;</p> <p>Provision of transit systems;</p> <p>Provision of security systems;</p> <p>Provision of specialist ventilation systems;</p> <p>IEE Guidance Note 7 category;</p> <p>Allowances for servicing specialist clinical equipment;</p>	Information to be integrated with co-ordinated room data sheets .	0.34%	<p>To what extent are the room data sheets completed to enable the evaluation to be completed</p> <p>How well do the room data sheets comply with the requirements of Schedule 8 part 3, the Functional Brief and the PPDDs</p>

[illegible]

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Overview of restrictions on the Trusts operation of the hospital imposed by compliance with the Bidders proposed energy model;</p> <p>Detailed annual energy consumption analysis calculations, supporting the statement of compliance, summarised in Giga-joules per 100 cubic metres of the buildings heated volume and the actual plant suppliers' details. Calculations to be presented in Microsoft Excel format, with all formulas available to view, accompanied by a descriptive guide to the calculations. The energy consumption analysis shall be supported by a dynamic thermal modelling assessment using IES software with the model provided for review, supported where necessary by a written report featuring assumptions made, systems incorporated and commentary on the results.</p>	<p>Energy Consumption Calculations in Excel format. Supporting Thermal Model in IES format (not used for Energy Target Calculations). Supporting descriptive documents in A4, maximum 30 sides including details of average year used (degree days for heating and cooling).</p>		<p>To what extent are the proposals are affordable within the constraints of the OB forms</p> <p>How well do the proposals demonstrate compliance with Schedule 8 parts 3 and 7</p>
ET4.5.15	<p>Renewable energy technology strategy to include:</p> <p>Description of the proposed renewable energy technologies offered together with an assessment of annualised consumption of each fuel type used;</p> <p>Confirmation of source of each fuel type used including potential suppliers and their location;</p> <p>Statement of compliance with Planning Authority requirements and acceptance of the technology on the site for the proposed renewable energy technologies. Future Fuel Flexibility Strategy to allow incorporation of other energy sources.</p>	<p>Written report including drawings and calculations (maximum 20 sides A3)</p>	0.19%	<p>The extent to which each sustainable technology reduces the annual fuel consumption</p> <p>How well do the proposals deliver carbon savings when the whole equation from source to end product</p> <p>How well are the proposals accepted by the SMBC Planning Department</p>
ET4.5.16	<p>Systems resilience strategies to include:</p> <p>Confirmation of resilience incorporated for each engineering system;</p> <p>Zoning of systems to minimise disruption due to systems failure;</p>	<p>Written report including drawings and calculations (maximum 20 sides A3)</p>	0.10%	<p>How well do the proposals demonstrate compliance with the requirements of schedule 8 part 3 on a system by system basis</p> <p>How resilient are the energy supplies</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Opportunity to add resilience in the future for each engineering system;</p> <p>Method of incorporating systems to support major medical equipment selected toward the end of the construction process;</p> <p>System capacity allowances for major medical equipment.</p>			How well will the Bidders design team support the Trust in ensuring the design meets the requirements of Schedule 13
ET4.5.17	<p>Security systems strategy to include:</p> <p>1:200 scale layout drawings indicating security strategy;</p> <p>Description of security system provisions.</p>	<p>Written report including drawings and calculations (maximum 20 sides A3)</p> <p>1:200 layout</p>	0.10%	How well do the proposals demonstrate compliance with the requirements of schedule 8 part 3, the Functional Brief and the PPDDs
ET4.5.18	<p>Commissioning statement including:</p> <p>Description of commissioning activities including commissioning management role;</p> <p>Overview of seasonal commissioning requirements.</p>	<p>Written report including drawings and calculations (maximum 20 sides A3)</p>	0.05%	<p>To what extent have the Bidder's supply chain developed an integrated commissioning programme</p> <p>To what extent does the design minimise the need for ongoing seasonal commissioning</p>
ET4.5.19	<p>Plant access, maintenance and replacement strategy including:</p> <p>Overview of plant locations and principle horizontal and vertical service routes;</p> <p>1:200 plans indicating any craneage requirements with allocated landing platforms;</p> <p>Detailed description of any necessary specialist plant movement operations including use of lifting beams and methods of overcoming changes in floor levels along a determined plant removal route.</p> <p>Description of loss of clinical service due to maintenance operations, i.e. operatives needing to shut off active systems when accessing permit to work areas to repair faulty systems.</p>	<p>Written report including drawings and calculations (maximum 20 sides A3)</p> <p>1:200 layout</p>	0.10%	How well does the design allow for plant replacements without affecting hospital services

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
ET4.5.20	Decontamination and control of infection report where associated with the fabric and building environmental systems.	Written report including drawings and calculations (maximum 20 sides A3)	0.10%	How well does the installation satisfy the commissioning requirements set out in Schedule 12
ET4.5.21	Life cycle statement detailing estimates for major items of plant and key distribution system components.	Written report including drawings and calculations (maximum 50 sides A3)	0.10%	To what extent does the lifecycle statement reconcile to the CAPEX values How well do the proposals demonstrate compliance with the requirements of Schedule 8 part 3
ET4.5.22	Passenger and goods lift usage traffic assessment and confirmation of proposed lift types and manufacturers. Escalator proposals complete with types, quantity and manufacturer.	Written report including drawings and calculations (maximum 50 sides A3)	0.34%	How well do the proposals demonstrate compliance with the requirements of Schedule 8 part 3
ET4.5.23	An aesthetic statement detailing the lighting to be provided both internally and externally.	A3 report including drawings and calculations. 50 pages max	0.05%	How well do the proposals demonstrate compliance with the requirements of Schedule 8 part 3 How well are the proposals integrated with the landscaping proposals How well are the proposals integrated with the internal design and finishes
ET4.5.24	Number and location of IT Communications rooms and any other ICT equipment that has space limitations.	A1 sized layout.	0.05%	How well do the proposals demonstrate compliance with the requirements of Schedule 8 part 3
			4.80%	
Section 4.6: Equipment				
ET4.6.1	An equipment schedule (BoQ) including indicative costs for fixed and design related equipment. To include: Track of changes to the ERM from the previous stage; Identification with rationale of significant changes to assumed responsibilities stated within the Trust issued ERM; Published revised ERM.	Bill of Quantities Spreadsheet. Updated Equipment responsibility Matrix integrated as part of the BIM asset management model	0.67%	How well do the proposals demonstrate coordinated supply chain working How well do the proposals demonstrate compliance with the requirements of Schedules 12, 13 and the Trust's requirements

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
ET4.6.2	<p>Method statement describing how the Bidder proposes to manage iterative changes to the ADB database during the process of design development.</p> <p>Response to include:</p> <p>Room data sheet iteration; Tracking of changes in component type, group/category and quantity following these through to consequential changes to the ERM;</p> <p>Integration of changes into the design process;</p> <p>Data management and control.</p>	A4 size report maximum of 5 sides including process diagram.	0.24%	<p>How well can the Bidder's supply chain achieve the bid deliverables of this criterion by working in partnership with the Trust</p> <p>How well do the Bidder's management proposals comply with the Trust's requirements</p>
ET4.6.3	<p>Bidders' proposal for providing CAD drawings and ADB C Sheets @ 1:50 scale for the purposes of equipment supplier loading.</p> <p>In particular:</p> <p>Architectural support in providing loaded C Sheet drawing sections to provide suppliers for loading;</p> <p>Architectural support in providing cleaned C Sheet drawings to provide suppliers for loading; Fixing heights of equipment; Integration of suppliers loaded drawings back into main drawings.</p> <p>Process to avoid services/duct clashes with major fixed equipment installation.</p>	A4 size document, maximum of 5 sides.	0.24%	How well do the proposals achieve the bid deliverables of this criterion
ET4.6.4	<p>Bidders approach to the overall design and construction programme to maximise flexibility regarding Trust provided fixed equipment.</p> <p>In the context of procurement and supplier selection response to include:</p> <p>Proposed milestone programme for generic construction related specifications for Trust provided fixed equipment; Proposed milestone programme for generic construction related specifications for Bidder provided fixed equipment;</p> <p>Proposed milestone programme for specific construction related specifications for Trust provided fixed equipment;</p>	A4 size document, maximum of 5 sides.	0.24%	<p>How well can the Bidder's supply chain achieve the bid deliverables of this criterion by working in partnership with the Trust</p> <p>How well do the proposals demonstrate compliance with the requirements of Schedules 12, 13 and the Trust's requirements</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	Proposed milestone programme for specific construction related specifications for Bidder provided fixed equipment.			
ET4.6.5	<p>Approach to identifying and managing accessories/options associated with bidder provided major equipment.</p> <p>Response to address:</p> <p>Method to provide flexibility regarding accessory selection;</p> <p>Bidder role in delivering holistic room design to support functionality.</p>	A4 size document, maximum of 2 sides.	0.24%	How well do the Bidder's management proposals comply with the Trust's requirements
ET4.6.6	<p>Method statement on how the bidder will manage the maintenance of major equipment provided by them (i.e. Pendants, Operating Lights etc) as identified in the ERM.</p> <p>Response to address:</p> <p>Maintenance mix rationale; Maximising equipment availability; Education and Training of support staff;</p> <p>Partnership with suppliers; DoH/MHRA hazard notices and device alerts; Manufacturer corrective notices.</p>	A4 size document, maximum of 5 sides.	0.29%	How well do the proposals demonstrate compliance with the requirements of Schedule 14
ET4.6.7	<p>Describe how the bidder will work with the Trust to minimise variations associated with the installation of Trust provided equipment as part of the equipment replacement programme throughout the operational phase of the project</p> <p>Response to address:</p> <p>Alterations to fixed furniture to accommodate equipment; Alterations to services such as power and data location and type; Late additional equipment fixing pre and post handover.</p>	A4 size document, maximum of 5 sides.	0.24%	How well do the proposals demonstrate cost control and value for money
ET4.6.8	Statement of bidder proposals for minimising instances of early installation of Trust maintained and lifecycled equipment with regard to equipment maintenance and warranty periods prior to Practical Completion.	A4 sized document, maximum of 5 sides.	0.24%	How well can the Bidder's supply chain and project team achieve the bid deliverables of this criterion by working in partnership with the Trust

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Proposed Installation approach;</p> <p>Proposed testing and handover approach;</p> <p>Volumes of ports (active and passive), volumes of switches and hubs, volumes of wireless network heads.</p> <p>This will demonstrate compliance with the Trust network requirements as set-out in the IM&T Specification in Schedule 8, Part 3, Appendix B</p>			<p>The required number (or equivalent) of cat 6a outlets provide;</p> <p>Network meets requirements for active network connectivity and spare capacity.</p>
ET4.7.4	<p>Project Co Infrastructure Support Proposals</p> <p>Project Co proposals to meet the Trust infrastructure support requirements detailing:</p> <p>Support principles;</p> <p>Proposed service levels and hours of service;</p> <p>Availability of staff and spares near to the hospital;</p> <p>Accreditations from the suppliers of the proposed equipment.</p> <p>Proposals will demonstrate compliance with the Trust network support requirements as set out in Schedule 14,</p>	Narrative in PDF format	0.36%	<p>How well are the following delivered:</p> <p>Achievement of Trust response time and service level requirements;</p> <p>Guaranteeing response times and availability;</p> <p>Escalation of faults and issues;</p> <p>Integration of IM&T services with the Trust's IM&T service desk;</p> <p>Proposed availability and response times of service staff;</p> <p>Proposed availability and response time of spare parts service;</p> <p>Approach to bug-fixes and software upgrades;</p> <p>Approach to cabling refresh.</p>
ET4.7.5	<p>Detailed Network Design</p> <p>Detailed network design shown on the architectural / technical drawings.</p> <p>This will need to address all aspects of the IM&T Specification.</p> <p>The proposals will be presented in the form of:</p> <p>1:1250 design including outdoor areas and car parks;</p> <p>1:500 design;</p> <p>1:200 for all departments;</p> <p>Supporting narrative commentary.</p> <p>This will demonstrate compliance with the Trust requirements as set-out in the IM&T Specification in Schedule 8, Part 3, Appendix B</p>	Drawings in CAD native and PDF format	0.24%	<p>How well does the detailed design achieve:</p> <p>Resilience approach – Diverse routing, and N+1 duplication of active equipment;</p> <p>Conformance with technical network standards and Good Industry Practice for design;</p> <p>Performance and configuration of core network;</p> <p>Physical and virtual security of the network;</p> <p>Wireless installation proposals and siting of the wireless transmitters;</p> <p>Wireless resilience;</p> <p>Wireless performance;</p> <p>Wireless security;</p> <p>Ease of operation of the design for the Trust;</p> <p>Approach to future proofing/expansion capacity;</p> <p>Logical network design (VLAN/IP addressing QoS).</p>

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
ET4.7.6	Specialist Wireless Network Design A specialist design detailing the number of and location of Wireless Access Points required to provide universal wireless coverage across the PFI site. Associated wireless network coverage maps to show that coverage will be adequate to deliver connectivity outlined in the IM&T specification. Outlines of assumptions used in design and mapping activities. Logical wireless network design showing how virtual wireless networks provided to deliver secure segmented wireless services	1:200 Drawings / proposed heat maps presented in CAD and PDF formats Supporting narrative as required.	0.36%	How well does the design achieve: Wireless coverage delivered in solution; Wireless solution proposed is robust and scalable; Coverage provided allows for individual device failure with minimal loss of service; Assumptions used appropriate; Ability to "fill in" black spots identified in proposal; Logical wireless design scalable and secure.
ET4.7.7	Trust / Project Co Responsibilities Bidders are required to provide full and specific details of the responsibilities relating to the installation, support and operation of the network that they expect to remain with the Trust split into two sections covering before and after Practical Completion.	Narrative in PDF format	0.24%	How well do the proposals address: Are the split of responsibilities between the Trust and Project Co practical and pragmatic; Have undue or unnecessary responsibilities been placed on the Trust; Have responsibilities been placed on the Trust that it will have difficulties in achieving; Are the Trust responsibilities clearly defined; Do any of the responsibilities increase Trust costs; Are the timetables for any Trust deliverables during installation (such as patching schedules) realistic; Are the penalties/impact of the Trust failing to meet a responsibility appropriate and proportionate.
			2.40%	
Section 4.8: Design and Construction Project Management				
ET4.8.1	Present a detailed design programme for post-financial close. The programme must show the periods allowed for completion 1:50 plans, and must be supported by narrative describing any assumptions upon which the programme is dependent plus the proposed process for delivering clinical sign-off.	Microsoft Project Programme plus A4 report	0.72%	How well have the Bidder's supply chain worked together as a team to deliver an integrated programme that fits with the realistic approvals process
ET4.8.2	Describe the project management proposals during the construction phase of the project, detailing in particular how it is proposed to partner effectively with the Trust. Evidence of successful implementation of the proposed arrangements, for each stage, on previous projects should be provided.	Written report (maximum 3 sides A4). Microsoft Project Programme	0.60%	How well does the response demonstrate compliance with the Project Agreement and all key milestones identified in the Project Schedules How well do the proposals demonstrate successful project management in a partnering environment How well do the proposals support BIM

Midland Metropolitan Hospital
Estates and Technical Bid Deliverables

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
ET4.8.3	Describe the proposed quality management arrangements during each of the construction and operation phases of the project, including organisational charts and design and construction quality plans.	Written report (maximum 3 sides A4)	0.36%	How well do the proposals demonstrate the effectiveness of the supply chain in delivering an integrated quality management system
ET4.8.4	Define construction methodologies and programmes including arrangements for and timing of site remediation, pre-completion commissioning and post-completion commissioning.	Written report (maximum 3 sides A4)	0.19%	How well does the response demonstrate compliance with the requirements of Schedules 9 and 12
ET4.8.5	Provide details of construction health and safety plans, plus proposals to comply with CDM regulations when the Planning Supervisor duty is transferred at Financial Close.	Written report (maximum 3 sides A4)	0.19%	How well do the proposals comply with the CDM regulations
ET4.8.6	Provide details of specific proposals for sourcing materials and components sustainably. This should include evidence of how the bidder intends to ensure this is achieved in practice, giving examples of likely materials and components. Names of specific suppliers to be used should be provided, together with a level (percentage of total materials and component cost) to which the bidder will commit to procuring sustainably, to support BREEAM Healthcare	Written report (maximum 4 sides A4)	0.19%	To what extent do the proposals contribute to the BREEAM assessment
ET4.8.7	Provide proposals for how the Trust will be supported in its need to access agreed areas within the hospital in advance of final completion in order to minimise the time required to open clinical services there. Identify specific risks associated with this process and state how you will manage/mitigate them (including any specific actions required of the Trust).	Written report (maximum 4 sides A4)	0.14%	Extent to which the proposals can demonstrate successful project management in a partnering environment
			2.40%	
Total E&T			24.00%	

Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	Final Tender Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning			
	Heading			
ET 5.1	Provide Evidence of market testing in accordance with appendix 6 of ITPD4	Excel Spreadsheet and copies of evidence (tenders / benchmarking etc)	Compliance	The evidence must provide proof that the costs have been market tested to the overall percentage proposed / defined in appendix 6 of ITPD4 (Feb 2015). It will be acceptable to increase a percentage of a higher order of testing and reduce a lower order but not vice versa.

Competitive Dialogue (CD) Finance Deliverables

Bidder outputs for all stages to conform to the following formats:
Text in Microsoft Word.
Spreadsheets in Microsoft Excel.
Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Evaluation Criteria
	CD Stage 4: Draft Final Bids Financial Deliverables			
	F4.1 Approach to Funding			
F4.1.1	The term sheet that Bidders should use in the financial model will be provided two weeks prior to submission in the format contained in Proforma F1. Bidders should provide their view on the deliverability of the Trust issued term sheet in the current funding market, the anticipated ability of potential funders to meet these terms and obtain credit committee approval, describe any associated risks. Bidders, where necessary using advice from its advisors, are to confirm that the content of their bid submission and their acceptance of Trust positions are within current market norms and are positions upon which they have signed contracts and obtained funding in the past.	A4 text		Not Scored
F4.1.2	Provide a comprehensive outline of the proposed risk capital (i.e. all finance ranking below senior debt) structure for the Project and an explanation of why it is considered suitable. Responses should include a risk capital term sheet covering all proposed forms of risk capital and at a minimum should contain: Real and / or nominal return requirements (blended and per tranche, as applicable); Any minimum and / or maximum investment requirements; Any covenants on the debt; Letters of support from Sponsors; Identity of the guarantor for any deferred risk capital subscription; Dividend and voting rights attached to each subscription. Confirmation of willingness to obtain letters of credit (or other acceptable forms of credit support), if required by funders or rating agencies. The level of support proposed by the Bidder for this Project must, based on the Bidder's prior experience, be at a level sufficient to satisfy funder requirements and investment grade rating (BBB or BBB+).	A4 Text	2%	Completeness. Deliverability of funding proposals in the market Deliverability and acceptability to the NHS
F4.1.3	If only a bank model is requested, then the written submission should detail the cost associated with achieving BBB and separately to achieve BBB+. If a bond model is requested then the costs of achieving BBB should be in the model and an additional cost to achieve BBB+ should be detailed in the submission).Bidders should confirm that they are willing to fund a 12% equity ratio, confirm the limit on how much equity they would support (beyond the 12%) and confirm that any alteration to the equity amount for a bond financing solution would use the same approach & rates as in the base case bond model. If the bidder would seek a lower return based on a higher equity stake then the bidder should confirm the blended equity return requirement and the basis (e.g. post tax nominal).	A4 Text		Included in affordability assessment – not scored.

	Deliverables	Format	Weighting	Evaluation Criteria
	<p>Bidders should quantify, separately and in detail, the likely costs associated with placing a bond (for example difference in documentation costs from a bank loan if any, costs of obtaining a credit rating (unless agreed to be obtained in advance) and the on-going cost of maintaining a credit rating). No additional costs payable to the bidder or its advisors etc. will be considered if not identified herein.</p> <p>Bidders are required to confirm that should key ratios be altered by a bond financing then they will optimise the financial model to meet these requirements in a similar manner to the base case model and state the relevant bond financing requirements used for the optimisation of the financial model.</p> <p>Bidders should confirm the cost, and acceptance, of the following requirements and should include their view on the deliverability of these requirements in the current funding market and any associated risks. In particular, bidders should confirm that in their experience the following would obtain a BBB- rating/private placement requirements. Bidders are asked to detail any amendments which may be required, and the associated costs, along with willingness to meet these requirements should the Trust wish to achieve a BBB rating.</p> <p>Construction period</p> <ul style="list-style-type: none"><input type="checkbox"/> Parent company guarantee(s) of subcontracting entities<input type="checkbox"/> Liability cap of 50% of construction contract price. Confirmation & cost of moving to 60% if required<input type="checkbox"/> Liquidated damages (subject to technical advice) based on the unitary charge for the period until the Project Agreement longstop date but also to include additional costs of construction, for example, finance costs accruing and technical advisor's costs.<input type="checkbox"/> Performance bond of 10% of construction cost. Confirmation & cost of moving to 15% if required<input type="checkbox"/> Retention bond of 3% from the construction contractor <p>Operating period</p> <ul style="list-style-type: none"><input type="checkbox"/> Parent company guarantees of operating subcontractor entities (where applicable)<input type="checkbox"/> Liability caps annually 100% of annual payment and, in the case of termination, 200% of annual payment from the Trust<input type="checkbox"/> Liability cap of 40% of the facilities management subcontractor contract price <p>Confirmation of the Sponsors' acceptance that any additional bonding required post submission of final bids shall be for the consortium's account alone.</p> <p>A bond model may be required at the next stage and will include a requirement for sensitivities to be undertaken</p>			

	Deliverables	Format	Weighting	Evaluation Criteria
	<p>Bidders are required to confirm that should key ratios be altered by a bond financing then they will optimise the financial model to meet these requirements in a similar manner to the base case model and state the relevant bond financing requirements used for the optimisation of the financial model.</p> <p>Bidders should confirm the cost, and acceptance, of the following requirements and should include their view on the deliverability of these requirements in the current funding market and any associated risks. In particular, bidders should confirm that in their experience the following would obtain a BBB- rating/private placement requirements. Bidders are asked to detail any amendments which may be required, and the associated costs, along with willingness to meet these requirements should the Trust wish to achieve a BBB rating.</p> <p>Construction period</p> <ul style="list-style-type: none"><input type="checkbox"/> Parent company guarantee(s) of subcontracting entities<input type="checkbox"/> Liability cap of 50% of construction contract price. Confirmation & cost of moving to 60% if required<input type="checkbox"/> Liquidated damages (subject to technical advice) based on the unitary charge for the period until the Project Agreement longstop date but also to include additional costs of construction, for example, finance costs accruing and technical advisor's costs.<input type="checkbox"/> Performance bond of 10% of construction cost. Confirmation & cost of moving to 15% if required<input type="checkbox"/> Retention bond of 3% from the construction contractor			
F4.1.4	<p>EIB</p> <p>Should EIB express interest in this scheme, the bidder should submit a separate model (or a scenario in the base model) which allows for EIB funding. Again, terms will be issued to the bidders two weeks before submission.</p>	Excel model		
F4.1.5	<p>Sub-contracts:</p> <p>Set out the following for each funding route proposed by the Bidder, including detailed sub-contract heads of terms for key subcontracts (inter alia construction and FM). These heads of terms should include at least the following:</p> <ul style="list-style-type: none">Identity of parent company guarantor(s) and letters of support;Detailed long stop requirements;Indexation;Proposed liability caps, termination caps, surety bonds and other contractor support that Bidders believe will be acceptable to potential funders (inc. rating agencies); andAny third party support (i.e. credit support) that Bidders believe will be required by rating agencies / funders). <p>To the extent the key subcontracts escalate at values other than RPI, Bidders shall clearly identify such escalations and provide a rationale.</p>	A4 Text		
F4.1.6	<p>Performance Bonding</p> <p>The Trust is seeking comfort that the level of surety bonding proposed is sufficient to attain an investment grade rating for the project. To this effect you are required to provide the following:</p> <ul style="list-style-type: none">Details of the guarantees and security package you expect to be required by funders;Details of the surety bonding required on comparable projects undertaken by the consortium with a corresponding rationale as to why you understand this was acceptable to the rating agencies;	A4 Text		

	Deliverables	Format	Weighting	Evaluation Criteria
	<p>How the proposed level relates to the current financial strength of the bidder entity guaranteeing the Construction contract; Describe the scenario(s) you have run to support the quantification, with reference to key assumptions / specific variables such as delay in replacing the contractor, increased construction costs as a result of the replacement, any deferred risk capital injections are brought forward to the date of the insolvency, delay in draw of bond and any other variables you consider relevant to fully support the proposed level of surety bonding;</p> <p>Provide the results and details of any further scenarios you believe are required to fully support the proposed level of surety bonding; and</p> <p>Confirmation of the Sponsors' acceptance that any additional bonding required post submission of final bids shall be for the consortiums account alone.</p>			
F4.1.6	<p>Hedging Strategy: The information regarding interest rates and hedging strategy should specify: The manner in which the Bidder will address the risk of future movements in interest rates, including a full description of its hedging strategy, details of any financial instruments which will be used to provide protection against interest rate movements, and the estimated cost of such protection. Bidders should also explain how this will minimise the costs to the Trust; Acceptance of the principle of benchmarking hedging instruments at or prior to Financial Close. Bidders should note that the Trust, given that it is taking the underlying interest rate risk, reserves the right to compare, and if necessary, compete hedging instruments at or prior to Financial Close. Bidders must confirm that they will provide the Trust with sufficient information to allow the Trust to benchmark these hedging instruments at or prior to Financial Close.</p>	A4 Text		
Total			2%	
	F4.2 Payment Mechanism			
F4.2.1	<p>Bidders should review and include comments on Schedule 18 (Payment Mechanism) including calibration and tolerances. No changes will be accepted to the Standard Form document. Any suggested changes to Trust specific elements will require a full explanation for the request and details of the savings this change will make to the cost inputs.</p> <p>Bidders are expected to address: practicality; value for money impact; and ability to obtain funding.</p> <p>Specifically, Bidders should comment on their acceptance of: Functional Area and Unit Weightings Room allocations within Functional Units Weighting applied to Functional Units Ratchet Appendix addressing Accessibility Condition Service Failure Point thresholds (as set out in Clauses 29 and 44 of the Project Agreement).</p> <p>Bidders should confirm their acceptance on the Payment Mechanism in its entirety and without amendment save for those issues expressly set out in the Agreed List.</p>	Excel/ A4	3%	<p>Compliance with Trust proposals.</p> <p>Acceptability of changes</p>
Total			3%	
	F4.3 Financial Assumptions			

	Deliverables	Format	Weighting	Evaluation Criteria
F4.3.1	Highlight any potential issues or advantages of the Bidder's design and commercial solution which they consider will impact upon the overall affordability envelope of the Project including (for example) lower soft FM costs reduced enabling works expenditure, lower energy costs, alternative lifecycle v initial capital outlay judgements or other impact on Trust costs. Bidders should include detailed assumptions and calculations of the projected savings in their written submission.	A4 text and MS Excel to highlight calculations		Included in affordability assessment – not scored.
F4.3.2	<p>Submit a full financial model based on the term sheets and the assumptions to be issued by the Trust. Bidders should assume a public sector capital contribution amounting to £100m less the cost of the Trust's remediation work, which is currently included within the capital cost assumptions. The receipt of this should be assumed in accordance with clauses 35.11 -35.13 (capital payments) of the Project Agreement.</p> <p>Bidders should assume in the financial model that the planned equity return for all parties is the same. Bidders should assume they will provide 55% of the equity when pricing the planned equity return. The model should allow for 3 equity providers with possibly differing return requirements. Actual returns will be incorporated post the equity funding competition.</p> <p>Bidders should confirm how their equity return would reduce (if appropriate) should the equity funding competition conclude that there would not be external equity providers. Bidders should submit a base financial model with partial indexation based on a natural hedge position. As a means of assessing the level of indexation, bidders should ensure that the running the model with RPI at 4% and at 1% does not breach the minimum ASDCR limit of 1.05 in any period. Please provide the outcome of the following sensitivities:</p> <p>RPI at 0%</p> <p>RPI at 5%.</p> <p>The Trust requires that you provide the effect on the DSCR minimum and average and all periods in which the outcome breaches a minimum of 1.05.</p> <p>The Trust will issue details of the proposed funding route on an agreed date prior to submission.</p> <p>Bidders should be able to populate a bank and bond (public and private) solution as required. Bidders should indicate the proposed proportion of the Unitary Payment to be indexed at RPI and justify this with reference to the underlying Project costs.</p> <p>There is no requirement to submit a hard copy of the financial model.</p> <p>The financial model should incorporate as a minimum: Funding plan; Projected profit and loss account; Projected balance sheet; Projected cashflow statement; Lifecycle and other reserve accounts as required; Cash waterfall; Taxation schedule; Depreciation schedule; and Cover ratios and IRR calculations.</p>	<p>Excel</p> <p>Financial projections on a monthly basis during construction, and semi-annual thereafter; Expressed in £'000;</p> <p>Not include any password protection (or the password must be disclosed);</p> <p>Contain no protected macros or hidden sheets; and All functions, formulae and linkages should be operational.</p> <p>Ratios and other relevant calculations should be in accordance with the term sheet definitions</p>		Included in affordability assessment – not scored.

	Deliverables	Format	Weighting	Evaluation Criteria
	<p>Construction start should be assumed as Financial Close. Key dates such as completions of phases, commissioning and final repayment of finance should be clearly identified with the proportion of UP payable at each phase identified</p> <p>Outputs of the model should include as a minimum:</p> <ul style="list-style-type: none"> Nominal and real IRR, both pre and post tax for the: Project; and Risk capital (both blended and individually for all forms of risk capital) The debt cover ratios set out in Proforma F1; Timing and phasing of risk capital injections and treatment in return calculations; NPV of real Unitary Payments assuming 100% performance and an NPV base date as set out in Schedule 18 as the Base Date and a discount rate of 3.5% and RPI assumption of 2.5%; A breakdown of all bid, development and SPV running costs as set out in Proforma F2; The average loan life of each debt instrument; and The impact on the Unitary Charge of the interest rate buffer (50bps). <p>The model should clearly specify the required Unitary Payment at the base date and in the first financial year.</p> <p>Bidders must confirm that their proposed Unitary Charge has been calculated on the basis of guaranteed performance and not expected or aspirational performance.</p> <p>The price base date set out in Schedule 18 detailed as the Base Date should be assumed for the Unitary Payment and all facilities management, lifecycle, insurance and SPV costs.</p>			
F4.3.3	<p>Bidders must provide a full data book and user guide to the financial model. Such user guide shall include, at a minimum, the following:</p> <ul style="list-style-type: none"> The key values input into the financial model including total capital cost, equipment cost, FM, lifecycle and SPV costs and cross-references between these inputs and the related source in the bid text; Working capital requirements; An explanation of how the optimisation has been undertaken and the key constraints applicable; A brief summary of the purpose and operation of all macros; A breakdown of development costs; and Confirmation that the cover ratio definitions correspond to those at Proforma F1 	A4 Text		Included in affordability assessment – not scored.
F4.3.4	<p>The financial model must be capable of running sensitivities in all key areas usually required by funders/ rating agencies (including those set out for typical cash breakeven scenarios and as per the funding assumptions set out in Proforma F3) including inter alia:</p> <p>Delay to Financial Close and the construction programme;</p> <ul style="list-style-type: none"> Increases in capital, facilities management, lifecycle, and insurance costs; Interest and inflation rate changes; Corporate tax and VAT rate changes; and Payment mechanism deductions. <p>Bidders should provide the output summary sheets for the sensitivity analyses required.</p> <p>Bidders should confirmation that the financial model can meet or exceed thresholds set out in the terms sheet</p>	<p>A4 text and MS Excel.</p> <p>A4 Text</p>		Included in affordability assessment – not scored.

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	Deliverables	Format	Weighting	Evaluation Criteria
	Sponsors' financial advisors shall confirm that there are no other sensitivities they would have expected to perform to satisfy a funder nor do they anticipate any further sensitivities to be required by participants in the equity funding competition and that they are satisfied that the outcome of the sensitivities undertaken would meet with funders' acceptance in that Bidders should include a confirmation that the financial models submitted have factored in the impacts of running these sensitivities and that the financial model can meet or exceed the breakeven thresholds set out therein.	A4 Text		
F4.3.5	Bidders must complete the Financial Proformas provided	Excel model		Included in affordability assessment – not scored.
F4.3.6	<p>Bidders should provide a statement confirming acceptance that in the event of more than 6 months delay to financial close, the Preferred Bidder's PFI financial model will be re-run to establish the appropriate payments taking into account the agreed adjustments(see below). If such an adjustment and re-run is appropriate then it shall be based upon the latest available publication of the BCIS and RPI indices at the date of the re-run which shall be deemed to be final for the purpose of this exercise alone.</p> <p>The appointment of a Preferred Bidder shall be dependent, among other things, on a written agreement that all prices must remain fixed up to 6 months beyond the anticipated financial close date. In the event that actual financial close occurs 6 months after the anticipated financial close date and this has not been caused or contributed to by the Preferred Bidder, then the deliverable will be adjusted as follows:</p> <p>Construction: BCIS building cost index - The estimated capital costs included in the Preferred Bidder's PFI financial model will be adjusted by application of the movement in the published BCIS indices between the expected date of financial close in the Final Bid on which the Bidder was selected and the actual date of financial close but only insofar as the delay to financial close has a material impact on the anticipated timing of incurrence of the capital costs.</p> <p>Hard FM costs: RPI – Hard FM costs included in the Selected Bidder's PFI financial model will be adjusted by application of the movement in the published RPI between the expected date of financial close in the Final Bid on which the Bidder was selected and the actual date of financial close but only if the delay to financial close has a material impact on the anticipated timing of incurrence of the Hard FM Costs</p> <p>Such adjustment will only begin from the date occurring 6 months after the end of the planned month of financial close and shall represent the sole and exhaustive remedy for a delay to financial close and that the Preferred Bidder's Bid shall otherwise remain valid in all other material respects</p>	A4 Text		Included in affordability assessment – not scored.
			Affordability	
	F4.4 Funding Competition			
F4.4.1	The SPV and its financial and legal advisors should re-confirm acceptance of the Funding Competition Protocol set out in Volume 4 of this ITPD. This protocol may have been updated by the Trust since the Interim deliverable stage.	A4 Text		Compliance
F4.4.2	The SPV and its financial and legal advisors should re-confirm acceptance of the Roles of Participants as set out in Volume 4 of this ITPD.	A4 Text		Compliance

	Deliverables	Format	Weighting	Evaluation Criteria
F4.4.3	The SPV and its legal advisors should re-confirm acceptance of the approach, timetable and responsibilities with respect to the equity funding competition and the potential involvement of IUK EU as set out in Volume 4 of this ITPD. Bidders shall submit Appendix 8 as requested.	A4 Text		Compliance
			Compliance	
	F4.5 Unitary Payment Phasing			
F4.5.1	The Trust's PSC assumes a single phase handover and the Trust considers it is extremely unlikely that any benefits provided by a multiphase solution would outweigh the disadvantages of maintaining three hospitals for any significant period. If Bidders wish to adopt an alternative approach they should justify the timing and amount of such phasing with reference to the actual costs incurred for each phase in a manner that can be easily reconciled to the financial model.	A4 Text and inclusion in the financial model		Included in affordability assessment – not scored.
			Affordability	
	F4.6 Income Generation			
F4.6.1	<p>Bidders should note the restrictions on income generation opportunities advised in ITPD3</p> <p>Proposals for the generation of any other third party income, should show likely turnover, profit sharing arrangements and a guaranteed level of income for the proposals. Reference should be made to the service provider, their experience and previous proven solutions.</p> <p>Bidders should demonstrate the deliverability of their proposals and that they are stand alone with no impact on the overall programme to Financial Close or where there is an impact, this should be highlighted.</p> <p>Bidders are required to confirm that all costs in delivering the proposals have been accounted for in the financial model and set out the amount of net income reducing the unitary payment which they are prepared to underwrite and the term for which this applies.</p> <p>Only proposals with this degree of certainty should be in the base case.</p>	A4 Text and inclusion in the financial model		Included in affordability assessment – not scored.
Total			Affordability	
	F4.7 Tax and Accounting			
F4.7.1	<p>Provide a detailed description of the tax and accounting assumptions made in the financial model including:</p> <ul style="list-style-type: none">The accounting treatment adopted;Confirmation that the financial model has been developed on a composite trader basis and, if not, why the commercial arrangements and a fixed asset tax treatment provides better value for money to the Trust;The split of taxable profits between trading, property rental and loan relationships;Tax treatment of interest and SPV costs during the construction phase;Tax treatment of development costs including any disallowable costs; <p>Tax relief for lifecycle costs;</p> <p>Deductibility of shareholder subordinated debt interest;</p> <p>Confirmation of the project effective tax rate and a reconciliation if this differs from the assumed corporation tax rate;</p> <p>The treatment of tax losses;</p> <p>Confirmation of any tax relief assumed (e.g. small / marginal rates and group / consortium relief); and</p> <p>VAT treatment and any irrecoverable VAT assumed. VAT must be included at the prevailing rate at the time of submission.</p>	A4 Text		Not Scored

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	Deliverables	Format	Weighting	Evaluation Criteria
	Stamp duty land tax - Confirm any stamp duty land tax assumptions.			
F4.7.2	Confirm that the tax and accounting treatment within the model is underwritten by the Bidder and that any changes to assumptions (with the exception of changes in the rate of Corporation Tax made up to Financial Close) will not increase the Unitary Payment to the Trust. Bidders should assume the Corporation Tax rate/(s) as enacted at the time. Changes in the rate of Corporation Tax up to Financial Close will be a Trust risk similar to interest rate risk. The financial model must be in accordance with IFRS.	A4 Text		Not Scored
F4.7.3	Provide a statement from the Consortium's Financial Advisors or external auditors and tax advisors that in their opinion the proposed accounting treatment is in line with IFRS and that the tax treatment is in accordance with current tax legislation. The response should also include the programme for obtaining, if deemed appropriate, any relevant pre-clearance from HM Revenue & Customs prior to Financial Close.	A4 Text		Not Scored
	Bidders are expected to have an independent (A Stage 1 i.e. preliminary) financial model audit report. Bidders are also required to confirm that all errors and issues discovered in the model post submission of Stage 2 (Final) bids (i.e. as a result of the final model audit) are solely for the account of the consortium. The extent of the model audit undertaken at this stage is therefore left to the bidders' discretion. The model audit letter should have a duty of care to the Trust, the equity provider via competition and the IUK EU.	A4 Text		Not Scored
			Affordability	
Total			5%	

Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	Final Tender			
	Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning			
	Heading			

Competitive Dialogue (CD) FM Bidder Deliverables

Bidder outputs for all stages to conform to the following formats:

Text in Microsoft Word.

Spreadsheets in Microsoft Excel.

Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p align="center">CD Stage 4: FM Deliverables Competitive Dialogue</p> <p align="center">The following outputs are requested from the Bidders to assist evaluation:</p>			
	<p align="center">Section FM 4.1: Approach to Management of Services Where relevant please supply details by service.</p>			
FM4.1.1	For each contractor involved in the provision of FM services provide a description of the companies vision, values , ethics, culture and management style. Describe the supply chain methodology and how subcontractors are approved.	A4 sized report. Max 2 pages per contractor.	0.23%	Clear vision and robust ethical statement. Demonstrates commitment to good governance.
FM4.1.2	Identify any interface relationships with the soft FM services and describe how these are to be managed Provide FM operational policy statements	A4 sized report. Max 2 pages per service.	0.23%	Demonstrates clear understanding of issues and has robust management plan in place
FM4.1.3	Provide a detailed management structure for each service to be provided : Include lines of communication and interfaces both internally and between Project Co and the Trust Provide detailed proposals for establishing and maintaining a 24 hour, 7 day single point of contact in respect of service requests, service provision and the monitoring of service standards. Identify the system for making and managing complaints	A4 sized report. Max 2 pages per service.	0.09%	Clear and comprehensive structure
FM4.1.4	Detailed description of performance risk management arrangements including: Identification of risk pricing principles associated with achieving performance targets Provision of detailed risk management mitigation procedures.	A4 sized report. Max 2 pages.	0.14%	Clear and concise strategy with clear links to schedule 18
FM4.1.5	Detailed description of quality management arrangements as follows: Details of how compliance with response and rectification times is achieved and recorded Details of how compliance is to be achieved with the performance standards for the relevant services Details of systems to demonstrate quality standards achieved in compliance with guidance and legislation for specific services Details of how sub-contractors are to be monitored to ensure contractual standards are met.	A4 sized report. Max 5 pages.	0.14%	Clear and concise arrangements which demonstrate a commitment to quality management
FM4.1.6	Detailed description of environmental management arrangements including: Environmental Policy (include Waste Management) Environmental Strategy	A4 sized report. Max 2 pages plus appendices	0.14%	Clear and concise arrangements

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
FM4.1.8	Mandatory Compliance Provide a statement demonstrating an understanding of legislation and mandatory requirements relevant to each service (including CQC registration requirements, Health and Safety and Trust policies) Provide a statement of compliance in respect of all Trust, mandatory and legislative requirements. Indicate the effect on service delivery and provide practical evidence of how each service provider will comply. Identify on a service by service basis how changes to mandatory and legislative requirements, will be initially identified and then implemented Provide details of proposed approach to the management and control of all mandatory compliance issues.	A4 sized report. Max 10 pages.	0.23%	Comprehensive and clear document demonstrating an understanding of the requirements and sound systems to ensure compliance Clear evidence of a proposed partnership approach in respect of all registration and statutory compliance issues
FM4.1.9	Change Management Provide detailed proposals of how Bidders will manage change during the transition to the new hospital.	A4 sized report. Max 2 pages.	0.09%	Clear and concise strategy which demonstrates links to schedule 12 commissioning plans.
FM4.1.10	Monitoring System Provide a clear and detailed explanation of the proposed monitoring system, demonstrating the mechanics through which monitoring results will drive the performance and payment mechanism, and indicating representative frequencies and volume of monitoring. This should include how performance failures are identified and reported and how compliance with all statutory and mandatory obligations will be addressed, including the provision of activity data. Give details of proposed IT systems and applications. Scheme specific worked examples of monitoring and reporting systems for each service to demonstrate the integrity of the system.	A4 sized report./A3 spreadsheets	0.14%	Clear and concise proposal demonstrating adequate systems for identifying failures. Relevant worked examples.
FM4.1.11	Governance and Risk Provide detailed proposals, including timescales, for the achievement of formal registration/accreditation of the quality systems, to ISO or equivalent levels, that will be adopted for providing the services. Provide details of approach to supporting the Trust in its obligation to manage risk	A4 sized report. Max 2 pages.	0.23%	Adequate proposals Clear and concise document demonstrating understanding of Trusts risk management policies and interaction with Project Cos Risk Management policies
FM4.1.12	Give details of proposed emergency procedures and contingency planning to cover all services contained in Schedule 14, service	A4 sized report. Max 10 pages.	0.14%	Clear and concise strategy
			1.80%	
Section FM 4.2: Approach to Management of Staff Where relevant please supply details by service				
FM4.2.1	Workforce structure for each service to be provided including: Numbers and grades of staff that will be providing each of the FM Services Roles and responsibilities of workforce Hours of operation for each of the FM Services including remuneration bands Details of sub-contracted services and how these will be managed. Provide comprehensive job descriptions and person specifications for all positions for this scheme including Details of cross matching of skills with transferring staff. Identification of skills shortages within the transferring staff.	A4 sized report. Max 10 pages plus appendices	0.41%	Completeness and appropriateness of structure and operational arrangements for each service Correlation of structures to staffing proformas

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
FM4.2.2	HR strategy for employment within the overall context of the Project timetable including recruitment and retention, incentivisation, pay structures, staff development, equality & diversity and training posts /social exclusion.	A4 sized report. Max 5 pages plus appendices	0.22%	Clear and concise strategy linked to project timetable.
FM4.2.3	Detailed proposals for pension provision for new recruits and transferred staff including a written undertaking in relation to the pension benefits to be provided.	A4 sized report. Max 2 pages.	0.11%	Clear and concise strategy and compliance with Trust requirements and relevant legislation
FM4.2.4	Detailed proposals for the Bidder's training and development strategy for managers, staff and contractors. Show how the strategy results in continuous service improvement. Include proposals for access required to trust staff prior to transfer to Project Co . Include a detailed plan of when access is required and for how long.	A4 sized report. Max 5 pages plus appendices	0.22%	Clear and concise strategy demonstrating a commitment to continuous service improvement Acceptable proposal for access
FM4.2.5	Full details of procedures for consulting with staff and their representatives (particularly trades unions) in relation to this project.	A4 sized report. Max 2 pages.	0.11%	Clear and concise strategy
FM4.2.6	Details of pay strategies and terms of employment covering Transferred staff New starters Include approach to principles of good employment practice	A4 text . Max 2 pages plus appendices	0.22%	Comprehensive description of all aspects of pay and employment strategy.
FM4.2.7	Detailed proposals of the human resources support which will be made available. Personal profiles of relevant staff should be included.	A4 text. Max 2 pages plus appendices	0.11%	Clear and concise strategy
FM4.2.8	Confirmation of acceptance of all the Trust's HR policies and procedures relevant to service delivery, particularly those relating to the screening of staff (including the requirement to commission CRB or other checks on staff operating in sensitive areas) and their proposals in respect of health screening and the immunisation of staff at risk.	A4 text	0.41%	Compliance with trusts requirements
			1.80%	
FM4.3 : Method Statements and Service Provision				
FM4.3.1	General Services: Provide detailed method statements that have clear referencing to Schedule 14 (service level specifications), relating to the Estates service Provide a detailed description of how each performance parameter will be achieved, demonstrating clear linkages and cross referencing to proposed Method Statements.	Statement/ Text confirming scope of services to be provided – A4 Maximum 20 sides.	0.90%	Service provision complies with brief Correlation with schedule 14 performance parameters
FM4.3.2	Estates: Provide detailed method statements that have clear referencing to Schedule 14 (service level specifications), relating to the Estates service Provide a detailed description of how each performance parameter will be achieved, demonstrating clear linkages and cross referencing to proposed Method Statements. Provide	Statement/ Text confirming scope of services to be provided – A4 Maximum 20 sides.	0.90%	Service provision complies with brief Correlation with schedule 14 performance parameters

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	<p>Detailed maintenance methodology (and indicative planned maintenance programme) describing the inspection and maintenance regimes in terms of planned, reactive, statutory and cyclical maintenance and continuing energy efficiency;</p> <p>Confirmation of numbers of Authorised Persons, Competent Persons and Suitably Qualified Persons to undertake maintenance tasks at times required;</p> <p>Confirm Project Co's approach to minimise hospital disruption whilst undertaking maintenance;</p> <p>From inception to conclusion provide a sample methodology for the categorisation, classification (routine, urgent, emergency) and make safe and rectification including remedial time scales of the following typical reactive maintenance requests:</p> <ul style="list-style-type: none"> Replacing a corridor emergency light; High temperatures and lack of ventilation in Theatres; Low oxygen pressure alarm in a high dependency area. Blocked WC Lift failure Water ingress Damaged fire door <p>Details of management and implementation of planning, design and project management services and minor works;</p> <p>Provide details of the Asset Management system to be used highlighting the key features.</p>			
FM4.3.3	<p>Grounds:</p> <p>Provide a detailed method statements that have clear referencing to Schedule 14 (service level specifications), relating to the Grounds service.</p> <p>Provide a detailed description of how each performance parameter will be achieved, demonstrating clear linkages and cross referencing to proposed Method Statements.</p> <p>Provide</p> <ul style="list-style-type: none"> Details of emergency call-out procedures that will be in place to address such occurrences as fallen trees, snow or ice clearance, burst pipes etc; Details of proposed methodology for dealing with gritting and snow clearance within the hospital site. 	Statement/ Text confirming scope of services to be provided – A4 Maximum 5 sides.	0.34%	<p>Service provision complies with brief</p> <p>Correlation with schedule 14 performance parameters</p>
FM4.3.4	<p>Utilities:</p> <p>Provide detailed method statements that have clear referencing to Schedule 14 (service level specifications), relating to the Utilities service.</p> <p>Provide a detailed description of how each performance parameter will be achieved, demonstrating clear linkages and cross referencing to proposed Method Statements.</p> <p>Provide</p> <ul style="list-style-type: none"> Description of proposed maintenance methodology describing the testing, cleaning and maintenance regimes including an initial programmed maintenance plan; Detail all arrangements for activity and housekeeping supporting the Trust to reduce energy usage. 	Statement/ Text confirming scope of services to be provided – A4 Maximum 5 sides.	0.68%	<p>Service provision complies with brief</p> <p>Correlation with schedule 14 performance parameters</p>
FM4.3.5	<p>Pest Control:</p>	Statement/ Text confirming scope of services to be provided – A4 Maximum 5 sides.	0.34%	

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
	Provide detailed method statements that have clear referencing to Schedule 14 (service level specifications), relating to the Pest Control service. Provide a detailed description of how each performance parameter will be achieved, demonstrating clear linkages and cross referencing to proposed Method Statements. Provide Detailed programme describing the inspections and treatment regimes to deliver a planned pest control service; Details of how emergency call out service will be delivered for the ad-hoc discovery of pests.			Service provision complies with brief Correlation with schedule 14 performance parameters
FM4.3.6	Helpdesk: Provide detailed method statements that have clear referencing to Schedule 14 (service level specifications), relating to the Helpdesk service. Provide a detailed description of how each performance parameter will be achieved, demonstrating clear linkages and cross referencing to proposed Method Statements. Provide Full details of the intended Helpdesk facility including its infrastructure, location and staffing structure; Demonstrate the operational processes the Helpdesk will undertake and its capability as a management tool	Statement/ Text confirming scope of services to be provided – A4 Maximum 5 sides.	0.68%	Service provision complies with brief Correlation with schedule 14 performance parameters
FM4.3.7	IM&T: Provide detailed method statements that have clear referencing to Schedule 14 (service level specifications), relating to the IM&T service. Provide a detailed description of how each performance parameter will be achieved, demonstrating clear linkages and cross referencing to proposed Method Statements.	Statement/ Text confirming scope of services to be provided – A4 Maximum 5 sides.	0.68%	Service provision complies with brief Correlation with schedule 14 performance parameters
			4.50%	
Section FM4.4: Facilities Management Service Costs				
FM4.4.1	Detailed costs for each FM service making comparisons against benchmark costs, using Bidder experience from other similar NHS PFI schemes. Complete the service proforma that identifies the pay and non pay cost elements for each of the Schedule 14 (service level specification) services. In conjunction with the Financial Submission, clear statements of where the Bidder perceives added value is demonstrated in respect of service delivery. Provide an accompanying list of assumptions relied on for producing the final price for FM services	Spreadsheet MS Excel statement/Text – A4 Maximum 5 sides. Proforma reference FM1	0.45%	Fully completed proforma with comprehensive analysis of costs across headings. Ties back to work force plans and figures are easily identifiable within the financial model
FM4.4.2	Bidders should set out any changes to the Schedule of Rates submitted at the end of Stage 3 to include the rationale for such changes.	Spreadsheet MS Excel.	0.45%	
			0.90%	
TOTAL FM			9.00%	

	Deliverables	Format	Weighting	Key issues to be considered in Evaluation
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Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	Final Tender			
	Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning			
	Heading			

Competitive Dialogue (CD) Legal and Commercial Bidder Deliverables

Bidder outputs for all stages to conform to the following formats:

Text in Microsoft Word.

Spreadsheets in Microsoft Excel.

Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Key Issues to be considered in Evaluation
	<p align="center">CD Stage 4: Draft/ Final Deliverables Formal Bidders Submission – Legal & Commercial Deliverables</p> <p align="center">The following outputs are sought from the Bidders to assist evaluation of design solutions:</p>			
L4.1	<p>Acceptance of the Draft Project Agreement</p> <p>Bidders should confirm in respect of all elements of their bid submission (including the technical submission) and on behalf of all members of the Consortium:</p> <p>that they accept the Draft Project Agreement in its entirety and without amendment; or</p> <p>that they accept the Draft Project Agreement in its entirety and without amendment save for those issues expressly set out in the Agreed List.</p> <p>Bidders should be aware that the Agreed List at this stage of the procurement must be minimal with only minor non-price sensitive issues left to be closed down</p> <p>Certificate of Acceptance of the Draft Project Agreement</p> <p>The certificate in the form set out in Appendix 3 of Volume 3 and signed by each member of the Bidder's consortium confirming:</p> <p>that they have no comments on the Draft Project Agreement and that the same is acceptable to them and their legal and technical advisors; OR all of their comments and concerns (including any comments or concerns of their respective legal or technical advisors) have now been reflected in the Draft Project Agreement or the Agreed List;</p>		4.00%	<p>Confirmation of requirements as set out in Volume 2</p> <p>Agreed list in line with Bidder meetings – no surprises.</p> <p>Provision of requested information in respect of the Agreed List and proposed drafting amendments</p> <p>Satisfactory completion of acceptance of Project Agreement.</p>

	Deliverables	Format	Weighting	Key Issues to be considered in Evaluation
	<p>that their bid has been priced on the basis of the Draft Project Agreement and does not reflect any other comments, reservations, qualifications or amendments (including those on the Agreed List);</p> <p>that any savings directly associated with any proposed project specific amendments set out in the Agreed List have been identified in such list together with a detailed explanation regarding how each such proposed amendment will realise such costs savings, the basis of calculation and any and all caveats relating to the calculated cost savings and the basis of calculation;</p> <p>that, subject only to the Agreed List, they accept fully the allocation of risks between the parties set out in the Draft Project Agreement; and</p> <p>that they have the ability to proceed to successful contractual/Financial Close in accordance with the timetable issued.</p>			
L4.2	<p>Consortium Arrangements:</p> <p>Bidders are required to set out the detailed structure of their consortium and management proposals for the Project.</p> <p>Bidders are required to provide the following:</p> <p>Confirmation that the details of principal sub-contractors and the relationship with Project Co remain as detailed in the Interim Submission.</p> <p>Confirmation that the details of the shareholders and the shareholdings in Project Co remain as detailed in the Interim Submission.</p> <p>Confirmation that the details of various classes of capital (including the rights and obligations of each class) in Project Co remain as detailed in the Interim Submission.</p> <p>Confirmation that the diagram depicting the relationship of the various parties and the accompanying explanatory notes as submitted in the Interim Submission remains correct.</p>		1.00%	<p>Clear and complete details/confirmation of sub-contractors and relationship</p> <p>Clear and complete details/confirmation of shareholders/shareholdings</p> <p>Clear and complete details/confirmation of classes and class rights/obligations</p> <p>Clear and complete diagram/confirmation of relationships plus notes</p>

	Deliverables	Format	Weighting	Key Issues to be considered in Evaluation
	<p>Confirmation that the statement in the Interim Submission as to whether Project Co will be owned directly and wholly by the shareholders or by a holding company that is wholly owned by the shareholders remains correct.</p> <p>Evidence of and confirmation that the security arrangements (e.g. Parent Company Guarantees and Construction Bonds) remain in place for Project Co as detailed in the Interim Submission.</p> <p>A copy of the proposed Memorandum and Articles of Association for Project Co if not provided in the Interim Submission or confirmation that the proposed Memorandum and Articles of Association for Project Co provided in the Interim Submission remain unchanged.</p> <p>Confirmation that:</p> <p>The Shareholders' Agreement (or the summary outlining the essential terms to be included in the Shareholders' Agreement) provided in the Interim Submission remains unchanged or to the extent that the same has changed, details of such changes; and</p> <p>it is not anticipated that any material changes will be made to the same between the submission of this deliverable and Financial Close.</p> <p>Identification of any party who Bidders anticipate may acquire an interest in Project Co at some future date.</p>			<p>Clear and complete details/confirmation of ownership</p> <p>Clear and complete details/confirmation of security arrangements re Project Co.</p> <p>Provision of suitable constitution for Project Co</p> <p>Clear and complete copy/confirmation of Shareholders' Agreement</p> <p>Clear identification of potential investor/acquirer of interest in Project Co or confirmation that none anticipated</p>
L4.3	<p>Detailed sub-contract heads of terms for each funding route required by the Trust. These heads of terms should include at least the following:</p> <p>Identity of parent company guarantor(s) and letters of support;</p> <p>Long stop requirements;</p> <p>Proposed liability caps, termination caps, surety bonds, liquidated damages and other contractor support that Bidders believe will be required by and acceptable to funders / rating agencies; and</p>		Compliance	Assessment of the bankability and deliverability/ acceptability in the market

	Deliverables	Format	Weighting	Key Issues to be considered in Evaluation
	<p>Any third party support (i.e. credit support) that Bidders believe will be required by funders /rating agencies/ monolines.</p> <p>The description of the guarantees should identify the means by which the Trust will be protected against a financial or other failure of the Project.</p> <p>The total sub-contractor support packages must be capable of achieving an investment grade rating and satisfying the requirements of a monoline (where wrapped options are required) and the full cost of such support must be reflected in the financial model.</p> <p>Details of sub-contracts</p> <p>Drafts of the sub-contract documentation agreed with the proposed design and build contractor, service provider(s) and key sub-contractors, including service failure point thresholds.</p>			
L4.4	<p>Validation Certificate</p> <p>A Validation Certificate (in the form set out in Appendix 3 to Volume 3) signed by each Bidder, confirming that the status of the bidding consortium or its members have not changed since submission of the Interim Deliverables.</p> <p>In the event that there have been changes Bidders are required to complete the relevant sections of the PQQ.</p>		Compliance	Not scored, but where notified changes do not meet PQQ requirements the Bid will become ineligible to continue in the procurement
L4.5	<p>Certificate of Non-Canvassing</p> <p>A Certificate of Non-Canvassing (in the form set out in Appendix 3 to Volume 3) signed by each Bidder.</p>		Compliance	Not scored, but where the certificate provided does not provide evidence of satisfactory compliance with the Trust's requirements, the Bidder may be eliminated
L4.6	<p>Certificate of Non-Collusion</p> <p>A Certificate of Non-Collusion (in the form set out in Appendix 3 to Volume 3) signed on behalf of each member of the Bidder's Consortium.</p>		Compliance	Not scored, but where the certificate provided does not provide evidence of satisfactory compliance with the Trust's requirements, the Bidder may be eliminated
L4.7	<p>Confidentiality Undertaking</p> <p>A Confidentiality Undertaking (in the form set out in Appendix 3 to Volume 3) signed on behalf of each member of the Bidder's Consortium.</p>		Compliance	Not scored, but where the certificate provided does not provide evidence of satisfactory compliance with the Trust's requirements, the Bidder may be eliminated
Total			5%	

	Deliverables	Format	Weighting	Key Issues to be considered in Evaluation
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Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	<p>Final Tender Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning</p>			
	Heading			

Competitive Dialogue (CD) Project Management Bid Deliverables

Bidder outputs for all stages to conform to the following formats:
Text in Microsoft Word.
Spreadsheets in Microsoft Excel.
Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Key Issues to be considered in Evaluation
CD Stage 4: Draft Final Bids				
Project Management Deliverables				
PM4.1	Project Management to Financial Close Project Execution Plan or similar document outlining approach from Preferred Bidder to Financial Close. Should present: Overall approach Approach to continuity Team members roles, qualifications and experience Role description, qualifications and experience of sub-contractors. Organisational charts	<10 pages A4	0.30%	Coherent approach described Approach to continuity is robust Roles and responsibilities are clear Capability of team is appropriate Capability of subcontractors is appropriate Decision making routes are clear
PM4.2	Programme to Financial Close Detailed programme to financial close ensuring alignment with Trust milestones. Order of activities, milestones, critical path, responsibilities and dependencies should be made clear	Gantt Chart in MS Project	0.50%	Target Financial Close date achieved Realistic timescales Programme clearly described Trust responsibilities made clear
PM4.3	Risk Management Outline of any risks that could impact on achievement of Financial Close milestones, showing mitigation of any risks identified.	Risk log with brief commentary if required.	0.50%	Demonstrates that risks are well understood Mitigation statements show solution focus
PM4.4	Handover following Financial Close Strategy for handover following Financial Close. To include:	< 6 pages A4	0.50%	Coherent approach described Approach to continuity is robust

	Deliverables	Format	Weighting	Key Issues to be considered in Evaluation
	<p>Overall approach</p> <p>Approach to continuity</p> <p>Team members roles, qualifications and experience</p> <p>Role description of sub-contractors.</p> <p>Organisational charts</p>			<p>Roles and responsibilities are clear</p> <p>Decision making routes are clear</p>
PM4.5	<p>Approach to collaborative working</p> <p>Statement outlining approach to collaborative working with the Trust from Preferred Bidder to Financial Close and during the construction phase. Includes the following:</p> <p>Statement of aims</p> <p>Each aim illustrated by an example of successful joint working on another scheme</p>		0.20%	<p>Shows commitment to collaborative working</p> <p>Demonstrates coherent approach</p> <p>Examples show delivery focus</p>
Total			2.00%	

Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	<p>Final Tender</p> <p>Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning</p>			
	<p>Heading</p>			

Competitive Dialogue (CD) Regeneration Bidder Deliverables

Bidder outputs for all stages to conform to the following formats:
Text in Microsoft Word.
Spreadsheets in Microsoft Excel.
Programmes in Microsoft Project Version 2010.

	Deliverables	Format	Weighting	Key issues to be considered in evaluation
	CD Stage 4: Bid Deliverables Part 2 Competitive Dialogue The following outputs are requested from the Bidders to assist evaluation:			
R4.1	<p>Bidders should produce a strategy explaining how they will maximise the regeneration benefits of the project to the population of Sandwell and west Birmingham.</p> <p>The strategy should include :</p> <p>How the Bidder proposes to maximise responsible purchasing. Provide details of specific proposals for sourcing materials and components responsibly. This should include evidence of how the Bidder intends to ensure this is achieved in practice, giving examples of likely materials and components. Names and details of specific suppliers to be used should be provided, together with a level (percentage of total materials and component cost) which the Bidder expects to procure responsibly.</p> <p>How the Bidder proposes to provide transparent, open and fair access to supply chain opportunities when sourcing materials, components and indirect labour.</p> <p>How Bidders propose to utilise the project to maximise training, skills and employment opportunities for deprived sectors of the population. Proposals should be given for Relevant Organisations and throughout their supply chains. This should include expected skills and training provision and apprenticeships.</p>	A4 text. Maximum 20 pages	1.00%	Use of the opportunities described by the Trust in ITPD3, provided in partnership with local councils are not mandatory but will provide a benchmark against which the strategies will be evaluated.
R4.2	<p>Bidders to propose the format of a monthly report to be provided to the Trust during the construction period detailing performance against the strategy.</p> <p>Bidders should signify their willingness to provide the report proposed and to participate in regular discussions with the Trust and representatives from the local councils on the report the targets set and achievement against those targets.</p>	A4 text/ excel spreadsheet	0.50%	The report should include benchmark targets for responsibly sourced materials and services and access to employment, skills and training.
R4.3	<p>Bidders to propose the format of a quarterly report to be provided to the Trust during the operational period detailing performance against the strategy.</p>	A4 text/ excel spreadsheet	0.50%	The report should include benchmark targets for responsibly sourced materials and services and access to skills, employment and training.

	Deliverables	Format	Weighting	Key issues to be considered in evaluation
	Bidders should signify their willingness to provide this report and to participate in regular discussions with the Trust and representatives from the local councils on the report the targets set and achievement against those targets.			
Total			2.00%	

Ref No.	Final Tender Information	Format	Weighting	Evaluation Criteria
	Final Tender Updated submissions to be as for Stage 4 but supplemented with clarifications and fine-tuning			
	Heading			

ITPD Volume 4

Appendix 3 – Bid Deliverables

ITPD Volume 4

Appendix 5 – Funding Protocol

MMH ITPD 4

Appendix 5

Senior Debt Funding Competition Principles

Objectives

1. The primary objective of the funding competition is to encourage competitive proposals for a senior debt funding solution which:
 - a. is firm, unqualified and deliverable;
 - b. does not undermine the Appointment Business Case (“ABC”) approval criteria;
 - c. enables the required amount of senior debt (including equity bridge and reserve facilities in the case of a bank debt solution) to be raised;
 - d. reduces the NPV cost of the Service Payments paid by the Trust (compared to that in the Reference Model as defined below); and
 - e. does not prevent reaching Financial Close by the proposed date i.e. **[to be added]**; and
 - f. does not require any renegotiation of the relevant Project Agreement and Schedules or other draft Project Documents / heads of terms, or any alteration of the risk allocation as agreed between the Trust and Preferred Bidder.

Process

2. Delivery of senior funding is the responsibility of the Preferred Bidder; including *inter alia*:
 - a. management of the senior debt funding competition process and of the funders Due Diligence advisers¹ to be agreed in the Funding Competition Methodology;
 - b. production of all materials required, and funding all costs incurred, in the funding competition process; and
 - c. meeting the timescales set out in the Preferred Bidder letter.
3. The Funding Competition will be run by the Preferred Bidder subject to advance approval from the Trust and their financial advisers in respect of key issues including *inter alia*:
 - a. timing of the competition;
 - b. developing the list of funders to be approached;
 - c. the documentation and level of detail issued to prospective funders;
 - d. evaluation criteria and selection of funders; and

¹ This will include facilitating access to the advisers for the potential funders during the competition

- e. final selection of bank vs. other (e.g. public bond) structure. Any difference in sponsor or other costs arising from the final selection of funding route should be clearly expressed in the Final Bid and will not be amended following selection of Preferred Bidder.
- 4. Consent of the PFU will be required at each stage including inter alia:
 - a. the contents of the information memorandum;
 - b. any reduction in the list of funders; and
 - c. final selection of the preferred funder.
- 5. Offers solicited from prospective senior debt funders must at a minimum:
 - a. be deliverable - final submissions from funders must have credit committee approval providing an unambiguous commitment to fund;
 - b. be sufficient (in total across each proposed funding structure) to cover the full required senior debt sum;
 - c. accept the ABC approval, Project Agreement, associated Schedules and all other Project Documents / heads of terms in full i.e. accept the risk allocation as set out in the Final Bid – prospective funders are therefore required to raise all detailed issues during the funding competition. Amendments to these documents or which affect approvals will score against the funder and may exclude the funder from participation;
 - d. facilitate the project to reach financial close by the proposed date; and
 - e. reflect the detailed funder's due diligence undertaken and accept novation of the funder's advisors.
- 6. Any proposed amendments to the agreed positions that may be suggested in the funder due diligence reports will have been reviewed and dismissed by the Trust and the Preferred Bidder by the time of the funding competition and funders should bid on the basis of the documentation as provided.
- 7. The Trust will not entertain changes to the Project Agreement or other Project Documents as a result of the funding competition or any other process prior to financial close (e.g. subsequent development of finance documentation). To the extent that any such change has a negative impact on the project it will be an equity risk rather than a risk for the Trust. The Trust therefore expects the bidder to develop the information memorandum to a sufficient level of detail (e.g. including proposed step-downs to subcontractors and funders) to achieve this aim. The same principle applies for all inputs into the financial model with the exception of those set out below in section 14 below.
- 8. Prospective funders should set out their proposals for interest rate and inflation hedging as part of the funding competition. Prospective funders should propose credit margins as part of the funding competition. The Preferred Bidder and prospective funders will be required to accept the principles of:

- a. public sector benchmarking of derivatives pricing at financial close; and
 - b. competing any GICs at financial close in the case of a bond solution.
- 9. The Preferred Bidder will model all funding competition responses agreed with the Trust to be so modelled as set out in the Funding Competition Methodology. The Preferred Bidder will prepare a summary report demonstrating the impact of each funding proposal on the initial Service Payment and NPV of Service Payments vs. those in the Reference Model as well as a tabular summary of pricing and key terms & conditions for each proposal (e.g. funders in columns and key funding terms in rows).
- 10. The competition will be re-run at the Preferred Bidder's cost if an insufficient number of compliant tenders are received (in the opinion of the Trust).

Model

- 11. A financial model containing generic funding terms will be provided to prospective funders ("Reference Model") by the Preferred Bidder. Funders are expected to improve on these terms but the dynamics of the model are unlikely to move to such an extent that the fundamental risk profile is materially changed. The model will be updated to reflect the terms of the selected funder in due course. If prospective funders feel that a revised model reflecting an alternative funding structure is necessary for them to perform their assessment of the project then they should outline their rationale to enable the Preferred Bidder and Trust to consider the request.
- 12. The Reference Model must allow terms for both public and EIB bank and capital markets / bond financing to be incorporated and all the appropriate sensitivities run in accordance with market practice.
- 13. The real pre-shareholder tax / post-SPV tax blended equity IRR included in the Reference Model pertaining to the Final Bid will not increase regardless of any change in rates or terms resulting from the Funding Competition.

Macroeconomic Changes & Trust Risks

- 14. Changes in macro-economic assumptions are wholly for the Trust's account as they are market rates on which the Trust has agreed to take the risk. The assumptions for each of the following have been described in the ITPD and will be issued prior to bid submission:
 - a. LIBOR/swap rate (excluding credit spread) and or reference gilt term
 - b. GIC rates;
 - c. Bond margin;
 - d. The risk allocation associated with a change to the Financial close date

15. The Preferred Bidder will run the competition in a manner that seeks to minimise the impact of any adverse market conditions.

Other Changes

16. Benefits arising from the funding competition and any improvements up to and including financial close will be wholly for the account of the Trust including, *inter alia*, the following:
 - a. improvements in bank terms such as fees, costs, margins, gearing, coverage ratios and increase in loan tenor;
 - b. reductions in required senior debt sensitivity thresholds such as rating agency cash breakeven requirements.
 - c. reductions in bond underwriting fees and associated costs; and
 - d. improvements in monoline terms such as fees, reserve account / facility requirements and surety bond / contractor support requirements.
17. Benefits from any incorporation of EIB finance are wholly for the account of the Trust.

Involvement of the Trust

18. All correspondence with senior funders in competition will be recorded in writing and available to all procuring parties (i.e. the Trust, the preferred bidder, DH, HMT and advisers).
19. The Trust and its advisers retain the right to attend all significant meetings² held with potential funders. 48 hours notice of such meetings must therefore be given to the Trust (at a minimum) including a detailed agenda for such meetings.
20. Regular summaries of significant communications pertaining to the competition and the position of any negotiations to be provided in advance of each meeting.
21. The competition will be run on a transparent, open book basis including access by the Trust to all financial modelling produced to assess submissions. This will include the Preferred Bidder's agreement to run any additional scenarios / sensitivities reasonably requested by the Trust and its advisers. The list of sensitivities as far as possible will be agreed in advance of the competition.
22. The financial decision with respect to the involvement of the EIB sits with the Trust who will consult with the Preferred Bidder accordingly. A paper outlining the PFU's key principles in respect of EIB involvement will be released separately.

² For the purpose of this protocol meetings are taken to include significant / all parties conference calls

Preferred Bidder Funding Competition – Protocol regarding roles of participants

Golden rule: to mirror the position as if funders were in place. Process is designed to benefit all participants by addressing risks at the appropriate stage.

Bidders are responsible for developing 'bankable' proposals and managing a transparent competition. Sponsors (bidders) are best placed to manage Funding Competition (FC). It is a *Preferred Bidder* Funding Competition. The table below summarises the roles of the key parties through the various stages:

Stage	Bidder	Trust	Trust Advisers	Funder Advisers	Funders	PFU
Pre Stage 1A	<ul style="list-style-type: none"> Agree scopes of Due Diligence (DD) adviser appointments Agree DD advisers' identities and be part of the appointment process Accept the Funding Competition Protocol Ensure their financial adviser has the requisite skills to execute a transparent funding competition 	<ul style="list-style-type: none"> Include FC Protocol in ITPD Manage the appointment of the DD advisers in an administrative (trustee) capacity Execute the DD adviser appointments 	<ul style="list-style-type: none"> Comment on the FC Protocol Comment on scope of DD advisers Comment on proposed shortlist of DD advisers Share draft DD scopes with a funder 		<ul style="list-style-type: none"> Soft market sounding for DD adviser appointment 	<ul style="list-style-type: none"> Oversee Referrals and disputes Available to all parties Ensure Compliance with DH policy Key interest in bankability for the submissions and approval processes
Stage 1A – Project Requirements		<ul style="list-style-type: none"> Review Stage 1 report 	<ul style="list-style-type: none"> Review Stage 1 report Advise on the need (if any) to modify aspects of the project following any clarification with DD advisers 	<ul style="list-style-type: none"> Prepare Stage 1 report in accordance with scope of requirements Some liaison with Trust advisers for clarification 		
Stage 1B and Flyover	<ul style="list-style-type: none"> Submit Draft Bid sufficiently detailed to inform bankability Astutely take any concerns on board to 	<ul style="list-style-type: none"> Review Draft Bids against evaluation criteria, which includes bankability Feed back critical 	<ul style="list-style-type: none"> Review Draft Bids against evaluation criteria, which includes bankability Raise any issues 	<ul style="list-style-type: none"> Involvement limited to inform Trust advisers queries, without needing to see bid details – 		

Stage	Bidder	Trust	Trust Advisers	Funder Advisers	Funders	PFU
	promote value of Bid, enhance bankability	problems to Bidders or modify project/extend CD process	and consider if any merit a discussion at a “flyover” level with DD advisers	sounding board role		
Stage 2 – Project Proposal	<ul style="list-style-type: none"> Review Stage 2 report At Minded to Appoint stage, develop detailed Funding Competition Methodology³ based on FC Protocol, with its financial adviser taking the lead 	<ul style="list-style-type: none"> Review Stage 2 report Agree FC Methodology including detailed evaluation criteria 	<ul style="list-style-type: none"> Review Stage 2 Report and advise on potential bankability issues Liaise with DD advisers to clarify any key concerns they raise Assist Trust with agreeing FC Methodology 	<ul style="list-style-type: none"> Prepare Stage 2 report in accordance with the scope of requirements Liaise with Trust advisers to clarify any risks highlighted 		
Stage 3A⁴ – Funding Competition (FC)	<ul style="list-style-type: none"> FC commences after PB appointment (i.e. Appointment Business Case has been approved) and detailed planning application has been submitted; Accept novation of the DD appointments (prior to FC) Responsible for delivering compliant competition Liaise with DD advisers to mitigate any highlighted security or other material risks to 	<ul style="list-style-type: none"> Oversight as necessary to scrutinise compliance with agreed process and agree PB’s proposals without causing delay to the process. Funder information pack to be seen by Trust to verify no material issues before circulation to Funders in competition Trust to review and comment on the draft evaluation 	<ul style="list-style-type: none"> Advice in support of Trust’s role 	<ul style="list-style-type: none"> DD advisers’ appointments to be novated to PB, as a condition of PB appointment Participate in surgeries Novate to client 	<ul style="list-style-type: none"> Funders to have access to DD advisers in surgeries but in a managed way (controlled by PB and its financial adviser) 	

³ Funding Competition Methodology to describe, among other things, information to be provided to funders, number of funders and financing instruments involved, club/underwriting/book-building basis, how pricing and terms will be set/conformed, how adequacy of competition will be ensured, evaluation methodology between funding routes and funders, and at what point bank credit committee approval will be obtained. The FCM will also address the details contained in the Funding Competition Protocol. The preferred bidder will share a summary of funders’ submissions and actual submissions if required by the Trust.

⁴ Preferred Bidder selected by this Stage

Stage	Bidder	Trust	Trust Advisers	Funder Advisers	Funders	PFU
	<p>enhance the attractiveness of the Information Memorandum</p> <ul style="list-style-type: none"> • With its financial and legal advisers, prepare IM which will be basis of FC and share with the Trust for comment • Liaise with DD advisers to accommodate funder issues if bankability/funding terms problematic • Prepare and share with the Trust the draft evaluation report for comment, with supporting information (as agreed in the FCM) • Novate DD adviser appointments to funder • Conclude funder selection and agree funding documents 	report				
Stage 3B – Financial Close	<ul style="list-style-type: none"> • Normal progression to FC 	<ul style="list-style-type: none"> • Normal progression to FC • Appoint specialist adviser for benchmarking swaps 	<ul style="list-style-type: none"> • Normal progression to FC • Involvement of specialist adviser to Trust at FC to benchmark swaps 	<ul style="list-style-type: none"> • Normal progression to FC 	<ul style="list-style-type: none"> • Normal progression to FC • Accept novation of DD adviser mandates from PB 	
Stage 4 – Post Financial Close		<ul style="list-style-type: none"> • Assist in PPE of FC 	<ul style="list-style-type: none"> • As per terms of appointment 	<ul style="list-style-type: none"> • Prepare bible of documentation etc 		

Detailed description of market testing methods			
1	True market test lump sum		
	package scope documents issued to supply chain in sufficient detail to attract lump sum quotations.		
	Subcontractors provide lump sum based on their own assessment of quantities and design solution where applicable.		
	Subcontractors to allow contingencies for risk and uncertainties		
	Carillion will consider and plug items excluded or qualified		
	Design documents include sufficient drawings and specifications to clearly brief requirements		
	Market testing evidence will be in the form of a lump sum quotation comparison with Carillion adjustments to achieve compliance		
	number of suppliers will depend on package value and available supply chain		
2	True market test rates only		
	Package enquiry documents issued to supply chain to attract a schedule of rates		
	Sufficient design information issued to communicate an approximate scope / size of project for suppliers to assess capability and estimate prelims and overheads		
	Carillion will estimate approx quantities and apply SC rates + on-costs		
	Quantity estimate will vary depending on design information available		
	Where quantities cannot be clearly established from available designs, they will be estimated by referring to benchmark projects.		
	Additional allowance will be made for predicted quantity growth during future design detailing. Eg. Internal doors		
	Where specifications are lacking, prices will be invited based on previous projects		
	Market testing evidence will be in the form of a Carillion measured price build-up based on SC rates		
3	SC target cost / budget estimate		
	This method will be used where design will rest with the subcontractor, or where insufficient design is available and SC are invited to put forward an estimate based on their experience.		
	Carillion will work with suppliers to establish uncertainty and risk retained in the budget cost and make allowance to cover future design development.		
	Carillion will assess the robustness of budget estimates and will include the cost of a preferred supplier, based on Carillion's confidence in their solution being the right balance of price v quality		
	Market testing evidence will be in the form of a Carillion cost build up supported by SC budget estimates		
4	quality / capability evaluation with all in rate for sample scope of works		
	This method will be used for higher risk packages or packages where early contractor input is needed		
	Carillion would normally select contractors with limited price competition in this situation on PFI bids		
	examples include insitu concrete frame, envelope facades etc		
	To help evidence price competition contractors would be invited to submit a budget estimate, based on a sample scope of works.		
	The total of the scope of works will not be used to value the works package, but used for an aspect of a MEAT evaluation of the contractor selected		
	Where this method is used in reference to NG Bailey selection, no sample pricing will be available, as their selection is part of our consortium. We could however compare their oncosts to others.		

	The package value will be built up in collaboration with the SC who will work towards establishing a GMP		
	Market testing evidence will be in the form of a sample priced scope of works priced by multiple SCs		
5	use RLUH market testing of rates and adjust for inflation		
	An alternative to sending out enquiries for suppliers to provide rates (as described in option 2)		
	Where design information is unavailable, an assumed solution will be taken from a more advanced design on RLUH		
	Market testing carried out on RLUH will prove current competition in the rates		
	an adjustment will be made to re-base market tested rates to the base date for MMH		
	Market testing evidence will be in the form of a comparison schedule of rates supported by copies of suppliers quotes relating to RLUH		
	MEP rates from other P21 projects can be used in a similar way applied to estimated quantities; see notes below		
	Equipment pricing will be gathered from various recent hospital procurement exercise. I.e. Evidence of supplier prices to validate the allowances within our equipment schedule.		
6	rely on benchmarking / estimator assessment		
	RLUH was won in competition very recently and provides robust transparent data for pricing MMH. We believe that where elements are in line with RLUH costs for elements this demonstrates VfM, assuming market conditions have not diminished. We also believe that market conditions have improved since RLUH was tendered and therefore rates from RLUH are better VfM than would otherwise be achieved through simple market testing at present day.		
	Notes:		
	MEP scope will not be clear enough at bid stage to accurately measure quantities. Quantities will be estimated by benchmarking against other projects. Market tested rates can then be applied.		
	We are currently proposing that much of the M&E pricing will be based on benchmarking, as design information will not be available for suppliers to provide prices. However, NG Bailey have a huge amount of design and price information relating to many P21 projects which we believe should be able to demonstrate VfM on MMH. Where the design information does not allow true market testing on MMH, using prices from P21 projects to generate a benchmark, should prove the pricing method is as good as a P21 project, which is being cited as the best alternative route to delivering MMH. We would welcome further discussion on this, as it should present an opportunity to replace any of the other proposed package methods that you may feel will not satisfy the VfM check.		
	The current values used to predict market testing percentages do not consider our strategy of maximising offsite manufacture. Where off site manufacture is used we will be single sourcing with NG Bailey. Therefore some currently identified elements of M&E may disappear, or reduce in value and a new package created for the construction of off site modules. This may affect the overall market testing percentage.		
	In all types, the estimated number of suppliers indicate the number invited. Where suppliers fail to return or decline to tender, market testing will be limited to the number of bids received.		
	If no bids are obtained pricing methods will revert to relying on benchmarking or estimator assessed allowance.		
	Market testing will be carried out progressively during CD4 stage; design information available at 28th February will be used for issue to contractors, which will then be used to support the bid submission on 9 April		
	Further market testing will then continue until June to support the final bid confirmation of 1 July		

	Market testing strategy		April '14 bid submission		July '14 bid confirmation		
	1	True market test lump sum	12,818,869	6%	24,091,094	12%	
	2	True market test rates only	36,072,523	18%	97,076,714	49%	
	3	SC target cost / budget estimate	34,565,659	17%	14,824,776	7%	
	4	quality / capability evaluation with all in rate for sample scope of wo	47,154,937	24%	17,667,716	9%	
	5	use RLUH market testing of rates and adjust for inflation	24,849,722	12%	12,087,623	6%	
		<i>Market tested subtotal</i>	155,461,710	78%	165,747,923	83%	
	6	rely on benchmarking / estimator assessment	44,097,365	22%	33,811,152	17%	
			-		-		
			199,559,075	100%	199,559,075	100%	
		<i>all indicative costs only, used only to calculate MT %</i>			-		

CPT	Sub	Description	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Contractor design input?	Measure required?	Scope documents
			April '14 bid submission			July '14 bid confirmation					
		Packages	199,559,075			199,559,075					
1	2030	Enabling and Remediation Works	-			-					
1	2200	Bulk Excavation	-	2	2	-	2	2	N	Y	
1	2250	Retaining walls	-	2	2	-	2	2	Y	Y	
1	2300	Groundworks and substructure	8,415,538	2	2	8,415,538	2	2	N	Y	
1	2350	Piling	3,829,264	1	3	3,829,264	1	3	Y	Y	
1	2400	Insitu concrete structural frame	31,080,221	4	3	31,080,221	2	1	Y	Y	
1	2401	Precast concrete frame components	2,308,000	2	3	2,308,000	1	3	Y	Y	
1	2410	Insitu concrete composite floor slabs to wards	-	2	2	-	2	2	N	Y	
1	2800	Structural Steelwork frame to wards	215,000	2	3	215,000	1	3	Y	N	
1	2801	Structural Steelwork - SECONDARY IN STRUCTURES - bracing etc	-	6		-	6		Y	Y	
1	2805	Structural Steelwork - SECONDARY IN ENVELOPE	475,000	6		475,000	6		N	N	
1	2810	Structural Steelwork - SECONDARY IN FIT OUT	73,847	6		73,847	6		N	N	
1	2850	Atrium structure	3,275,550	3	2	3,275,550	1	2	Y	N	
1	2860	Atrium core structures	-	3	2	-	3	2	Y	N	

1	3000	Fire Protection to steel frame	30,000	2	3	30,000	2	3	N	N	
1	3001	Stair structures - PCC flights	7,500	2	3	7,500	2	3	N	Y	
2A	3100	envelope cladding infills to car park perimeter	-	3	2	-	3	2	Y	Y	
2A	3200	External facades to podium floors	17,785,859	3	2	17,785,859	2	2	Y	Y	
2A	3210	External facades to ward floors	-	3	2	-	2	2	Y	Y	
2A	3201	Atrium envelope	4,383,675	3	2	4,383,675	1	2	Y	Y	
2A	3202	Entrance canopies - main entrance, ED and ambulance	-	1	2	-	1	2	Y	N	
2A	3204	Car park shutters and barriers	36,000	1	2	36,000	1	2	N	N	
2A	3206	Curtain Walling to car park entrance hall and front elevation	-	2	2	-	2	2	Y	Y	
2A	3215	Louvres	-	2	2	-	2	2	Y	Y	
2A	3250	Rendered facades	-	5	2	-	2	2	N	Y	
2A	3260	SFS	-	3	2	-	3	2	Y	Y	
2A	3400	scaffolding	280,000	3	1	280,000	3	1	Y	N	
2A	3500	Windows within masonry or rendered walls	30,000	2	2	30,000	2	2	N	Y	
2A	3510	External Doors (General)	164,150	2	2	164,150	2	2	N	Y	
2B	3600	Roof Finishes - lightweight sheet roof cladding	5,881,350	2	3	5,881,350	2	3	N	Y	
2B	3610	Roof membranes - hot melt inverted roof systems	-	2	3	-	2	3	N	Y	
2B	3620	Green Roofs	-	2	3	-	2	3	Y	Y	
2A	3700	Brickwork & Blockwork External walls	467,400	2	2	467,400	2	2	N	Y	
3A	3800	Drylining & Plastering	6,510,604	5	3	6,510,604	2	3	Y	Y	
3A	3820	Glazed Partitions	2,330,475	5	2	2,330,475	2	2	N	Y	
3A	3830	COLD ROOMS	31,763	5		31,763	3		Y	N	
3A	3840	smoke curtains	310,805	1	2	310,805	1	2	Y	N	
4B	3900	Builderswork (Firestopping & Sealing)	1,479,124	6		1,479,124	6		N	N	
2A	3910	Building mainenance provision - abseil rails bmu etc	100,000	3	1	100,000	3	1	Y	N	
3A	4000	Suspended Ceilings	2,885,810	2	3	2,885,810	2	3	N	Y	
3A	4200	Prefabricated Toilet Pods	2,520,000	2	2	2,520,000	2	2	Y	Y	
3A	4305	Screeding	229,903	2	2	229,903	2	2	N	Y	
3A	4310	Epoxy or terrazzo flooring	194,793	5		194,793	2	2	N	Y	
3A	4320	Car park painted floor finishes	-			-			N		
3A	4350	Vinyl Floors	3,513,584	2	3	3,513,584	2	3	N	Y	
3A	4352	Carpet and entrance matting	224,609	2	3	224,609	2	3	N	Y	
3A	4353	Acoustic wall finishes to atrium	232,498	2	2	232,498	2	2	N	Y	
3A	4375	Hard Wall Finishes	- 159,112	5		- 159,112	5		N	Y	
3A	4395	Hygienic and sheet wall finishes	116,464	5		116,464	2		N	Y	
3A	4400	Doors, Frames & Ironmongery - TIMBER	2,711,080	2	2	2,711,080	2	2	N	Y	
3A	4410	Doors, Frames & Ironmongery - STEEL	222,340	2	2	222,340	2	2	N	Y	
3A	4420	Doors, Frames & Ironmongery - GLASS	159,439	2	2	159,439	2	2	N	Y	

3A	4430	Doors, Frames & Ironmongery - Theatres	-	2	2	-	2	2	N	Y	
3A	4435	Doors, Frames & Ironmongery - shutters and gates	5,000	2	2	5,000	2	2	N	Y	
3A	4445	General Joinery	828,542	6		828,542	6		N	N	
3A	4450	Atrium fit out and finishes	1,038,775	3	1	1,038,775	2	2	N	Y	
3A	4510	General Metalwork ENVELOPE	-			-			N		
3A	4550	Handrails & Balustrades (INTERNAL)	1,008,871	2	2	1,008,871	2	2	Y	Y	
3A	4555	Handrails & Balustrades (ROOF)	75,000	2	2	75,000	2	2	Y	Y	
3A	4800	Painting & Decorating	1,225,351	2	2	1,225,351	2	2	N	Y	
3A	4960	Wall Protection	539,213	6		539,213	3		N	N	
3B	5100	Sculpture & Artwork + Specialist fit out & finishes	350,000	6		350,000	6		N	N	
3B	5200	Signage, general INT + EXT wayfinding and door labelling	711,112	6		711,112	6		N	N	
3B	5350	Catering & Kitchens	200,000	3	2	200,000	3	2	N	N	
3B	5900	Furniture (Fixed)	198,099	6		198,099	6		Y	N	
3B	5910	Equipment	10,634,735	5	2	10,634,735	5	2	N	Y	
3B	5950	specialist rooms - turnkey fit out	337,584	6		337,584	6		Y	N	
4B	7400	Lift Installation	3,642,800	1	3	3,642,800	1	3	Y	N	
4A	7900	ICT in equipment list	5,325	6		5,325	6		N	N	
1	8100	Hard Landscaping	75,000	2	2	75,000	2	2	N	Y	
1	8200	Soft Landscaping	1,296,800	3	2	1,296,800	3	2	N	N	
1	8300	External Drainage	800,000	6		800,000	2		N	N	
1	8400	Roads & Paving	1,598,600	2	2	1,598,600	2	2	N	Y	
1	8500	Fencing and gates	415,000	2	2	415,000	2	2	N	Y	
1	8510	Street Furniture	157,500	2	2	157,500	2	2	N	Y	
4A	8611	BWIC external services	450,000	2	1	450,000	2	1	N	Y	
1	8800	Canal works	350,000	6		350,000	3		Y	N	
1	9999	Adjustments / sundry allowance / VE	- 1,168,480	6		- 1,168,480	6		N	N	
		MEP Packages									
4A	MM011	Air Handling Units	750,000	2	3	750,000	2	3			
4A	MM013	Fans	80,000	6		80,000	6				
4A	MM013A	High Temperature Extract Fans	60,000	3	2	60,000	3	2			
4A	MM013B	Fume Extract Fans	4,000	3	2	4,000	3	2			
4A	MM014A	HEPA Filters	8,000	3	2	8,000	3	2			
4A	MM015	Noise Control	82,000	6		82,000	6				
4A	MM016	Grilles/Diffusers/Louvres	145,000	6		145,000	4				
4A	MM018	Ventilation - Other Items	36,000	6		36,000	6				
4A	MM018A	Variable & Constant Volume Box	60,000	6		60,000	3				
4A	MM018B	Duct Mounted Coils	30,000	6		30,000	3				
4A	MM018C	Pressure Relief Dampers	40,000	5		40,000	3				

4A	MM018D	Fume Cupboards	10,000	3	2	10,000	3	2			
4A	MM018F	Fire Smoke Dampers & Panels	870,000	6		870,000	6				
4A	MM018G	Heat Recovery Units	200,000	6		200,000	3				
4A	MM031	Chillers	1,000,000	1	3	1,000,000	1	3			
4A	MM033	Fan Coil Units/Terminal Units	440,000	6		440,000	4				
4A	MM033A	Fan Convectors	3,000	6		3,000	6				
4A	MM033B	Chilled Beams	600,000	6		600,000	6				
4A	MM040	Boilers	450,000	1	3	450,000	1	3			
4A	MM043	Heat Exchangers	45,000	6		45,000	3				
4A	MM045A	Electric Water Heaters	4,000	2	3	4,000	2	3			
4A	MM045C	Calorifiers	90,000	2	3	90,000	2	3			
4A	MM047	CHP Units	800,000	1	3	800,000	1	3			
4A	MM049A	Radiators	10,000	6		10,000	4				
4A	MM0498	Fan Convectors	3,000	6		3,000	6				
4A	MM049C	Unit Heaters	3,000	6		3,000	6				
4A	MM049D	Radiant Panels	180,000	4	2	180,000	3	2			
4A	MM049F	Trench Heating	8,000	4	2	8,000	4	2			
4A	MM049G	Air Curtains	18,000	5		18,000	3				
4A	MM050	Circulating Pumps	200,000	6		200,000	3				
4A	MM051	Booster Sets	55,000	5		55,000	3				
4A	MM051A	Gas Boosters	12,000	5		12,000	3				
4A	MM052	Pressurisation Units	45,000	5		45,000	3				
4A	MM056	Pump Ancillaries	50,000	5		50,000	5				
4A	MM060A	Steel Pipework & Fittings	1,000,000	6		1,000,000	6				
4A	MM060B	Copper Pipework & Fittings	900,000	6		900,000	6				
4A	MM060C	Cast Iron Pipework & Fittings	420,000	6		420,000	6				
4A	MM060D	Plastic Pipework & Fittings	250,000	6		250,000	6				
4A	MM061	Valves	950,000	6		950,000	6				
4A	MM062	Pipeline Components	80,000	6		80,000	6				
4A	MM062A	Water Meters	24,000	5		24,000	5				
4A	MM0628	Gas Meters	12,000	5		12,000	5				
4A	MM062C	Heat Meters	26,000	5		26,000	5				
4A	MM0620	Air & Dirt Separators	18,000	5		18,000	3				
4A	MM070	Sanitary Ware	1,500,000	5	2	1,500,000	5	2			
4A	MM090	Dry Risers	140,000	5		140,000	3				
4A	MM120A	Physical Water Conditioner	30,000	5		30,000	3				
4A	MM163	Rainwater Harvesting	26,000	6		26,000	3				
4A	MJ010	Fixings, Brackets & consumables & carriage	230,000	6		230,000	6				

4A	MJ500MA	Buffer Vessel	40,000	3	2	40,000	3	2			
4A	MJ906	Gas/Fuels/Chemicals	20,000	6		20,000	6				
4A	SM017	External Mains Installation	220,000	1	3	220,000	1	3			
4A	SM020	Fuel Systems Installations	190,000	3	2	190,000	1	2			
4A	SM022	Medical Gas Installations	2,500,000	6		2,500,000	3				
4A	SM024	Refrigeration & DX Systems	150,000	6		150,000	3				
4A	SM025	Flue & Chimney Installations	170,000	3	2	170,000	1	2			
4A	SM026	Trace Heating & Leak Detection	25,000	6		25,000	4				
4A	SM030A	Sprinklers	1,000,000	3	2	1,000,000	3	2			
4A	SM030C	Gas Fire Suppression	60,000	3	2	60,000	3	2			
4A	SM033	Hydrant Installation	200,000	3	2	200,000	2	2			
4A	SM034	Ductwork Installations	2,500,000	6		2,500,000	6				
4A	SM060	Thermal Insulation	1,800,000	6		1,800,000	6				
4A	SM061	Tank Installation	50,000	3	2	50,000	1	2			
4A	SM080	Controls	3,000,000	6		3,000,000	6				
4A	SM220	Testing & Commissioning (Mech)	280,000	6		280,000	6				
4A	XXXXXSA	GSHP	680,000	3	2	680,000	1	2			
4A		Pneumatic Tube	260,000	6		260,000	6				
4A	ME010	Switchgear HV	510,000	1	3	510,000	1	3			
4A	ME014	Switchgear LV	1,700,000	3	2	1,700,000	3	2			
4A	ME014C	Distribution Boards	250,000	3	2	250,000	2	2			
4A	ME021	Lighting: External	630,000	6		630,000	3				
4A	ME022	Lighting: Emergency	580,000	4	2	580,000	3	2			
4A	ME022B	Emergency ltg Static Inverter	220,000	5		220,000	2	3			
4A	SM025	Lighting - Controls	420,000	6		420,000	4				
4A	ME026	Lighting - General	2,200,000	6		2,200,000	4				
4A	ME030	Busbar Mains Distribution	42,000	3	2	42,000	3	2			
4A	ME032	Busbar Underfloor	16,000	3	2	16,000	3	2			
4A	ME045	Containment - Steel	310,000	6		310,000	6				
4A	ME046	Containment - PVC	36,000	6		36,000	6				
4A	ME047	Conduit - Steel	90,000	6		90,000	6				
4A	ME050	Cable - Armoured	2,000,000	6		2,000,000	6				
4A	ME051	Cable - Singles	250,000	6		250,000	6				
4A	ME052	Cable Fire Performance	220,000	6		220,000	6				
4A	ME060	Wiring Accessories	190,000	6		190,000	6				
4A	ME090	Control Equipment	80,000	6		80,000	6				
4A	ME100	Appliances	200,000	6		200,000	6				
4A	SE010C	Generator System	1,800,000	1	3	1,800,000	1	3			

[illegible]

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Appendix 6 – Market Testing

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Appendix 7 – Declaration

APPENDIX 7: DECLARATION

This Declaration should be completed, signed and returned with the Bidders' Response and signed by a Partner, Director or authorised representative i.e. in their name on behalf of the Bidder.

Name of Bidder:

Having examined carefully the terms of this ITPD, and all other documents made available to us, and having satisfied ourselves as to all other relevant matters, we enclose our Response and confirm that it comprises all the documents required to be submitted in accordance with the ITPD.

Acceptance of Conditions

We confirm that we have read and understood all the documentation issued by or on behalf of the Trust including, for the avoidance of doubt, all disclaimers.

We confirm that all engagement with the Trust remains "subject to contract" and that the identification by the Trust of us as the most advantageous tenderer will not constitute a binding agreement or contract between us until a formal written agreement or agreements has or have been executed.

We confirm that by providing our Response, we have satisfied ourselves as to the accuracy and completeness of the information we require in order to do so including that information contained in this PQQ and any other documents provided by the Trust.

Confidentiality

We confirm that we have not breached or knowingly permitted to have breached any confidentiality requirements stipulated by the Trust in connection with the procurement process.

Canvassing

We confirm that we have not:

- offered any inducement, fee or reward to any member or officer of the Trust and/or any contracting authority or any person acting as an advisor to the Trust and/or any contracting authority in connection with the procurement process; or
- done anything which would constitute a breach of the Bribery Act 2010; or
- canvassed or otherwise contacted any officer of the Trust prior to contract completion about any aspect of the ITT in a manner not permitted by this ITT (including, without limitation, contact for the purposes of discussing the possible transfer to the employment of the Bidder of such officer),

and we acknowledge that we may be disqualified (without prejudice to any other civil remedies available to the Trust and without any prejudice to any criminal liability which such conduct by a Bidder may attract) in the event that it transpires that we were or are in breach of this confirmation.

Non-Collusion

We confirm that we have not:

- (a) entered into any agreement with any other person with the aim of preventing Responses being made or as to the fixing or adjusting of the amount of any Bid or the conditions on which any Bid is made; or

- (b) entered into any agreement or arrangement with any other Bidder that any such Bidder shall refrain from submitting a Response or as to any amounts in our Response to be submitted; or
- (c) informed any other person, other than the Trust, of the amount or the approximate amount of the Bid, except where the disclosure, in confidence, of the amount of the Bid was necessary to obtain quotations necessary for the preparation of the Bid for insurance, for performance bonds and/or contract guarantee bonds or for professional advice required for the preparation of the Bid; or
- (d) caused or induced any person to enter such agreement as is mentioned in this section or to inform the Bidder of the amount or approximate amount of any rival Response; or
- (e) offered or agreed to pay or give or have paid or given any sum of money, inducement or valuable consideration directly or indirectly to any person for doing or having done or causing or having caused to be done in relation to any other tender or proposed tender any act or omission,

and we acknowledge that we may be disqualified (without prejudice to any other civil remedies available to the Trust and without any prejudice to any criminal liability which such conduct by a Bidder may attract) in the event that it transpires that we were or are in breach of this confirmation.

Signed¹:

Name (capital letters):

For and on behalf of:

(insert name of Bidder)

Position:

Date:

¹ To be signed by each Bidder (and, where the Bidder is a Consortium, by each consortia member)

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Appendix 9 – Funding Competition Timeline

SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST

MIDLAND METROPOLITAN HOSPITAL PROJECT

THIRD PARTY EQUITY FUNDING PROCESS / TIMELINE

STEP	EQUITY FUNDING PROCESS ACTIVITY	PROJECT PHASE / DATES	DESCRIPTION OF DEBT FUNDING PROCESS ALONGSIDE EQUITY
1.	Bidders confirm willingness to: <ul style="list-style-type: none"> Allocate up to 25% of equity in their SPV through an Equity Funding Competition(EFC) Run an EFC process should they subsequently become Preferred Bidder Produce an evaluation methodology and selection procedure for agreement with IUK Equity Commit to provide all the equity in the SPV (and have their bid evaluated on that basis) should the EFC fail to achieve a VfM outcome for the Authority and/or IUK equity choose not to invest 	At PQQ	
2.	At two bidder stage, each Bidder proposes a long-list of potential candidates to take part in the EFC. List to be vetted and agreed with IUK Equity	During Competitive Dialogue with two Bidders Phase	Mirrors equity process
3.	"Minded to appoint Preferred Bidder" discusses investment with potential candidates and produces a short-list to receive Mini Information Memorandum (MIM)	At "minded to appoint" PB stage (3 September 2015 – 10 September)	
4.	"Minded to appoint Preferred Bidder" to send letters and MIM to short-listed EFC candidates setting out investment opportunity and process from there to financial close ("FC").	At "minded to appoint" PB stage (3 September 2015 – 10 September)	Mirrors equity process
5.	PB to liaise with shadow funder's technical advisors, sponsor's lawyers and due diligence advisors to make available to short listed candidates the full suite of due diligence already carried out in each discipline.	At "minded to appoint" PB stage (3 September 2015 – 17 September 2015)	Mirrors equity process
6.	PB to identify what further DD needs EFC candidates have (if any). The costs of any additional DD to be incorporated into the funder's solution.	At "minded to appoint" PB stage (3 September 2015 – 17 September 2015)	Mirrors equity process
7.	Any additional DD to be carried out and information packages provided to the potential equity funders.	At "minded to appoint" PB stage (17 September – 22 October 2015)	Mirrors equity process
8.	HMT confirm their investment decision as to whether IUK Equity Unit will take public equity stake (of 20%) or not.	At PB stage (PB appointed 22 October 2015)	Mirrors equity process

9.	Final DD reports and all project documentation to be provided to the listed equity funders for review	At PB stage (22 October 2015 – 29 October 2015)	Mirrors equity process
10.	EFC candidates review documentation and prepare proposals	After PB stage (from 22 October 2015 – mid / end Nov 2015)	Mirrors equity process
11.	PB reviews equity proposals and selects a preferred equity provider using the agreed evaluation methodology overseen by the Authority and IUK equity.	After PB stage (by 31 December 2015)	Initial down selection of debt funders followed by a second stage selection process
12.	Confirmation from sponsors' lawyers and shadow funder technical advisors that Duty of Care letters will be delivered to the selected equity funder prior to FC.	Pre FC (January 2016)	Shadow funder's lawyers and technical advisors novated to the selected debt funder.
13.	Equity provider prepares for FC	Up to FC (up to 15 April 2016)	Mirrors equity process

What else will be happening during this period?

Other activities which will be progressing in parallel to the funding competitions are:-

- Full planning consent being granted
- Judicial review period in relation to that
- Confirmatory Business Case
- Gateway Review 3B
- Appointment of Independent Tester

Timetable / Key Programme drivers

Preferred Bidder is appointed on 22 October 2015 and Financial Close is scheduled for 15 April 2016.

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Appendix 11 – Hurdle Term

SAWB MMH – Funding Terms ITPD – Feb 15

Fixed Interest LIBOR Swap rate to be assumed is 2.20% p.a. (plus a buffer of 1.0%) = 3.20%

Please assume remedial costs of £2m – this is to be deducted from the total capital contribution of £100m

Project:	Sandwell and West Birmingham Hospital NHS Trust
Borrower:	A special purpose vehicle incorporated by the Shareholders to undertake the Project.
Shareholders:	Xxxxx % Xxxxx % Equity to be injected by way of share capital and/or subordinated debt.
Facilities	Senior Term Loan Facility To finance a proportion of the Project Costs by way of cash advances. To be repaid from project operating cashflows.
	Equity Bridge Facility To finance a proportion of the Project Costs by way of cash advances. To be repaid from injection of shareholder subordinated debt.
Lead Arrangers:	
Lenders:	The Lead Arrangers. Standard assignment and transfer rights will apply.
Debt; Equity	Max 90:10
Credit Facility Amounts:	Senior Term Loan Facility: up to {£xxm}. Change in Law Facility: up to {£xxm} Equity Bridge Facility: up to {£xxm}
Currency:	Great Britain Pound (GBP)

Project Costs:	<p>For the purposes of the above loan facilities, these are defined as scheduled costs incurred by the Borrower in designing, constructing and commissioning the various elements comprising the Project including, inter-alia, the following:</p> <p>Capital and commissioning costs;</p> <p>Development costs as per audited financial model;</p> <p>Insurance premia;</p> <p>PPP Consortium overheads;</p> <p>Contingencies;</p> <p>Interest, fees and other financing charges;</p> <p>Fees of professional advisers;</p> <p>Taxes and VAT;</p> <p>Initial working capital requirements;</p> <p>Payments under interest rate hedging agreements;</p> <p>Operating and maintenance costs not funded from revenues;</p> <p>Initial funding of the DSRA, and</p> <p>Initial funding of the MRA.</p>
Availability:	<p>For the Senior Term Loan Facility From the date of satisfaction of Conditions Precedent until the full commencement of operations date.</p> <p>Equity Bridge Facility available until the end of the construction period.</p>
Final Maturity:	<p>Senior Term Loan Facility:</p> <p>29 years from Full Service Commencement giving a maximum tail of 1 years</p>
Grace Period:	<p>Grace periods of up to 1 year after the end of the availability period to be permitted.</p>
Repayments:	<p>Senior Term Loan Facility:</p> <p>After the grace period, outstanding to be repaid in semi-annual instalments on the basis of a sculpted repayment profile, subject to covenants being complied with.</p> <p>Change in Law Facility;</p>

	<p>Pro-rata to remaining Senior Term Loan Facility repayments. For the avoidance of doubt, a cash sweep is not required.</p> <p>Equity Bridge Facility: After the grace period, outstanding to be repaid in a single bullet through the injection of shareholder subordinated debt.</p>
Drawdown:	<p>Senior Term Loan: Drawdowns shall be made in minimum amounts of GBP 250,000 and multiples of GBP 100,000, except for the last drawdown.</p> <p>Equity Bridge Facility Drawdowns shall be made in minimum amounts of GBP 25,000 and multiples of GBP 10,000, except for the last drawdown.</p>
Interest Rate:	<p>Interest on outstanding will be payable at the following rate: LIBOR + Applicable Margin + SWAP Margin + MLAs.</p>
Interest Period:	<p>1 month during the construction period. 6 months during the operating period. The interest periods will match the interest payment dates.</p>
Applicable Margin:	<p>Senior Term Loan Facility and Change in Law Facility: Construction Period: 140 bps Operational Phase Years 1-30: 140 bps</p> <p>Equity Bridge Facility Construction Period 125 bps backed by an acceptable Letter of Credit</p>
Mandatory Cost	<p>Determined in accordance with standard Loan Market Association ("LMA") formula.</p>
Hedging	<p>The SPV will enter into an interest rate swap in respect of 100% of the Senior Term Loan Facility.</p>
Hedging Charges	<p>Fixed Rate SWAP Credit Margins 20 bps and MLA of 3 bps per annum over the relevant Sterling swap inter-bank offer rate.</p>
Default Interest	<p>The applicable interest rate plus 200 bps p.a.</p>

Agency Fee	£40,000 per annum during construction and £30,000 indexed annually to RPI thereafter. This fee shall be payable to the Facility Agent semi-annually in arrears.
Other fees	None.
Arranging and Underwriting Fee:	Senior Term Loan Facility and Change in Law Facility: 225 bps flat on the total amount of the Facility, Equity Bridge Facility 200 bps flat on the total amount of the Facility
Commitment Fees:	Senior Term Loan Facility and Change in Law Facility: • 50 % of margin calculated on the daily undrawn and uncanceled amounts and paid semi-annually in arrears until the end of the Availability Period. Equity Bridge Facility: • 50 % of margin calculated on the daily undrawn and uncanceled amounts and paid semi-annually in arrears until the end of the Availability Period.
Debt Service Reserve Account	6 months interest and principal and commitment fees.
Maintenance Reserve Account ("MRA"):	The Borrower shall establish and maintain a 3 year forward looking maintenance reserve cash balance held with the Facility Agent on a basis to be agreed between the Borrower and the Lead Arrangers. The balance of the MRA will be funded upon a 3 year look forward of major maintenance requirements (100 %, 67 %, 33 %) subject to annual review of the major maintenance plan and costs for the remainder of the concession period by the Technical Adviser
Debt/Equity Ratio:	The debt/equity ratio will be defined as the ratio of the outstanding amount under the Senior Term Loan Facility to the amount of share capital and outstanding subordinated debt provided by the Shareholders. The ratio shall not exceed 90:10 at the end of the availability period.
Cancellation	The Borrower may cancel unused portions of each Facility at any time

	<p>without penalty, subject to the following conditions:</p> <p>Following such cancellation, sufficient available funding will be in place to finance the Project until the end of construction;</p> <p>Any hedging breakage costs are paid by the Borrower;</p> <p>Amounts cancelled will not be available for subsequent drawings;</p> <p>In any event, all undrawn portions under any Facility will be automatically cancelled at the end of the relevant Availability Period.</p>
Voluntary Prepayments	<p>On five business days' written notice, the Borrower may prepay all or any part of the debt under any of the loan facilities without penalty subject to the following conditions:</p> <p>Hedging breakage costs will be for the account of the Borrower; and</p> <p>Prepayment of the loans will be in multiples of GBP 100,000 (subject to a minimum of GBP 250,000, unless the whole balance of the loan is being prepaid.</p>
Distribution Lock-up	<p>Dividends and subordinated debt interest and principal repayments may be paid by the Borrower when:</p> <p>The first Senior Term Loan Facility repayment instalment has taken place;</p> <p>The MRA is funded to the required level;</p> <p>Fully funded Debt Service Reserve Account;</p> <p>The Senior Debt Loan Life Cover Ratio ("LLCR") at the latest calculation date exceeds 1.15 ;</p> <p>The Annual Debt Service Cover Ratio ("ADSCR") for the year just completed exceeds 1.10 ; and</p> <p>No Event of Default is continuing under the Financing Documents or would result from such payment.</p>

Security:	<p>All amounts due under the Facility and hedging agreements will be secured by first ranking fixed and floating charges over (or an assignment by way of first ranking security of) the following:</p> <p>the Project contracts, (including an assignment of the availability payments) and all bonds and guarantees arising therefrom;</p> <p>insurance policies;</p> <p>all other assets of the Borrower;</p> <p>assignment of any performance guarantees in favour of the Borrower; and shares of the Borrower, without further recourse to the Shareholders</p> <p>Direct Agreements with the Council and as may be required in relation to Project Related documents.</p> <p>Letter of Credits from acceptable financial institutions with a minimum rating of A+ (to cover any subordinated debt investment not made at Financial Close)</p> <p>All Security will be given in favour of a security trustee who will hold such Security for the benefit of the Lenders who will share in the Security pari-passu.</p>
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Conditions Precedent:	<p>The signing of the Credit Facility will be subject to the following inter alia:</p> <p>Receipt of reports in a form and substance reasonably satisfactory to the Lenders' from their independent advisers, i.e.:</p> <ul style="list-style-type: none"> i. a technical adviser; ii. an insurance adviser; and iii. a financial model auditor. <p>Satisfactory legal opinions from the Lenders' legal advisers regarding standard enforceability and validity of contracts plus significant Council vires and certification confirmation;</p> <p>All project documents being in satisfactory form and signed by relevant parties;</p> <p>The Base Case Financial Model being reasonably satisfactory to the Lenders as evidenced by a minimum LLCR 1.23 , minimum ADSCR 1.20 and average ADSCR 1.22 .</p> <p>Compliance with all applicable Money Laundering requirements.</p> <p>No material adverse change to the project, counterparties, financial markets which has led to insufficient capacity in the market.</p> <p>The utilisation of the signed Credit Facility will be subject to satisfaction of the following Conditions Precedent customary for this type of Facility:</p> <p>Execution of, and satisfaction with all Conditions Precedent under the Project contracts in a form acceptable to the Lenders;</p> <p>All Security is in full force and effect and appropriately perfected</p> <p>Satisfactory Planning Approval and other required permitting;</p> <p>Agreed insurances in place;</p> <p>Expiry of Judicial Review period</p> <p>Satisfactory hedging being in place</p> <p>Construction of minor facilities and availability of funds adhere to base case assumptions at the commencement of construction.</p>
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<p>Representations and Warranties:</p>	<p>To be provided by the Borrower relating, inter alia, to the following matters:</p> <p>The Borrower has limited liability, is duly incorporated, validly exists under the laws of England, has necessary power and Council to enter into and perform its obligations under the Funding Agreements and the Project Contracts;</p> <p>The Borrower's entry into and performance of the Funding Agreements and the Project Contracts does not conflict with any law, the Borrower's Articles of Association or any other document binding on the Borrower or its assets;</p> <p>No unremedied default under the Funding Agreements is outstanding nor to the best of the Borrower's knowledge and belief is any party to the Project Contracts in material breach of any provision thereof which is reasonably likely to have a material adverse effect on the Borrower the Project;</p> <p>All authorisations will have been obtained which are required to enable the Borrower to enter into and to perform its material obligations under the Funding Agreements and the Project Contracts;</p> <p>To the best of its knowledge, after due enquiry, no litigation is pending or threatened against the Borrower which would have a material adverse effect upon its ability to perform its material obligations under the Funding Agreements and the Project Contracts;</p> <p>There is no security in place which has not been disclosed by the Borrower to the Lenders other than as contemplated by the Funding Agreements or agreed with the Facility Agent;</p> <p>To the best of its knowledge, no proceedings for winding-up of the Borrower are outstanding;</p> <p>The Borrower has no material tax liabilities which are due and payable but unpaid other than those being contested in good faith and by appropriate proceedings;</p> <p>All material necessary environmental consents/approvals other than those which are subject to planning provisions, will have been obtained and will be in effect; and</p> <p>There are no circumstances that are likely to prevent or interfere with compliance with applicable environmental laws and approvals or give rise to an environmental claim (of which the borrower is aware having made all due enquiry) which in either case would impair the ability of the Borrower to perform or comply with its material obligations under the Funding Agreements and would do so in a manner or to an extent which would be materially prejudicial to the interests of Lenders.</p> <p>Certain of the above representations will be deemed to be repeated on each drawdown date.</p>
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Covenants:	<p>Customary for this type of facility and to include inter alia:</p> <p>Restriction on the disposal of assets except in the ordinary course of business (unless prohibited by the Project Contracts);</p> <p>Restriction on incurring any further indebtedness outside the Funding Agreements;</p> <p>Restriction on the granting of security;</p> <p>Restriction on the type of business to be carried out;</p> <p>Not to amend or terminate any Project Agreement, or to provide consent to any transfer of obligations without the agreement of the Lenders;</p> <p>Maintenance of required insurances, subject to Uninsurability provisions in the Project Agreement;</p> <p>An undertaking to apply the proceeds of claims for compensation under the Project Contracts or otherwise arising out of the Project;</p> <p>The provision to the Facility Agent of the agreed financial, technical and other information, including annual and semi-annual financial statements, quarterly technical reports to the Technical Agent until construction completion, quarterly project cashflow forecasts completed using assumptions acceptable to the Lead Arrangers;</p> <p>Notification of Events of Default; and</p> <p>The provision to the Facility Agent of details of litigation and arbitration against the Borrower which, if adversely determined, would have an adverse effect on the ability of the Borrower to comply with its obligation under the Funding Agreements.</p>
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Cover Ratios:	<p>Annual Debt Service Cover Ratio (“ADSCR”) will be determined on a semi-annual basis starting six months after the end of the Availability Period and shall be calculated as being the ratio of:</p> <p>Net Cash Flow, being the sum of operating revenues including interest income less transfers to/(from) the MRA, operating and maintenance costs, taxes paid and increases/(decreases) in working capital; to</p> <p>The aggregate of principal and interests paid or payable under the Senior Term Loan Facility plus commitment fees payable on senior facilities</p> <p>in each case, in respect of the 6-month period ending on the first calculation date, and the 12-month period ending on the subsequent calculation dates.</p> <p>Assumed releases from any additional reserving originated from the lock up ratios shall be taken into account in the Net Cash Flow for the purpose of recalculation of the ADSCR</p>
	<p>Loan Life Cover Ratio (“LLCR”) will be determined semi-annually starting at the end of the Availability Period as the ratio of:</p> <p>The net present value (at a discount rate equal to the forecast weighted average cost of funds drawn under the facility) of projected Cash Flow Available for Debt Service calculated from the calculation date to the Final Maturity plus the outstanding balance of the DSRA; to</p> <p>The outstanding principal under the Senior Term Loan Facility on the calculation date.</p> <p>where Cash Flow Available for Debt Service is the sum of operating revenues (including interest income) less operating and maintenance costs, taxes paid, and increases /(decreases) in working capital, including transfers (to)/from the MRA.</p>

Events of Default:	<p>The loan agreement shall incorporate such clauses as are standard for projects of this nature and shall include but not be limited to the following events where material:</p> <p>Events leading to the winding up or insolvency of the Borrower;</p> <p>Material breach of covenants;</p> <p>Illegality;</p> <p>Insufficient funds available to meet total Project costs;</p> <p>If the most recently calculated ADSCR (for the period just completed) is less than 1.05</p> <p>If the most recently calculated LLCR (for the period just completed) is less than 1.10</p>
Technical Adviser:	£105,000 at FC plus £220,000 at the mid point of construction
Insurance Consultant:	£20,000
Legal Advisers:	£270,000 including VAT to the extent irrecoverable
Model Auditor:	£35,000
Documentation:	The Facility Agreement will contain all customary UK PFI protection.
Legal/Due Diligence Fees and Expenses:	The Borrower will pay reasonable due diligence and independent tester costs, subject to prior agreement and approval of these costs.
Governing Law:	The Facility Agreement and all related documents will be governed by the laws of England.

APPENDIX 11e – EVALUATION OF FINAL BID

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case

Sandwell & West Birmingham Hospitals NHS Trust

Midland Metropolitan Hospital Project

Trust Board – Preferred Bidder and Final Bid Evaluation Report

1. EXECUTIVE SUMMARY

- 1.1 The purpose of this paper is to provide the Board with information needed to enable them to appoint Preferred Bidder.
- 1.2 The Trust has already closed dialogue which means that there can be no more changes to the scheme apart from fine tuning and non-price sensitive amendments.
- 1.3 At the point at which The Hospital Company is appointed Preferred Bidder the Trust has a fixed price bid which is subject only to changes resulting from the outcome of the funding competitions (a Trust risk).
- 1.4 The Trust also loses the ability to cease the procurement on the basis that the Bid is not compliant. At this point therefore it becomes more or less certain that if the procurement is stopped, The Hospital Company will be reimbursed by the public sector for its Bid Costs.
- 1.5 At the end of June The Hospital Company had expended c £6.5m in bid costs and are likely to spend c £1.1m per month from July to December.
- 1.6 This document summarises the results of the Final Bid submission stage of the procurement process for the Trust's Midland Metropolitan Hospital Project and provides details of the Preferred Bidder letter.
- 1.7 The Final Bid Submission evaluation was originally intended to enable the Board to choose between the two final Bidders.
- 1.8 The ITPD was issued to three bidders in September 2014. One bidder (Balfour Beatty) withdrew immediately after issue. A second bidder (Momentum Healthcare) engaged in the early part of dialogue and then stopped. They had not submitted a response by the interim submission deadline of 12.00pm on 12th December 2014 and therefore are considered to have effectively withdrawn from the competition.
- 1.9 The Hospital Company submitted an interim bid which was scored and declared to be appropriate.
- 1.10 The Trust conducted an option appraisal to agree the best way forward. The preferred option was to continue the procurement with a single bidder subject to agreeing a suitable set of additional criteria to be inserted into the ITPD to mitigate the risk of lack of competition. These criteria were formally agreed by DH/HMT on 26th March 2015 and accepted by the bidder on 30th March 2015.
- 1.11 The Hospital Company submitted a Draft Final Bid on 2nd April 2015.
- 1.12 The Draft Final Bid was evaluated and declared compliant including the additional single bidder criteria set out in section 2.3 of the re-issued ITPD 4.
- 1.13 The Trust gave feedback on the Draft Final Bid at the end of April and dialogue has continued throughout May and June with the objective of a) improving any areas which were scored as 3 (poor) and b) any areas which could be targeted to improve the overall scores.
- 1.14 The generic appointments business case (GABC) has now been approved and the Trust closed dialogue on 17th July 2015. No further significant changes/ changes with price implications can now be made.
- 1.15 The Hospital Company submitted their Final Bid on 17th July 2015.

- 1.16 The Bid has been evaluated and is compliant. All Bid Deliverables score at least 4 (adequate) and the overall weighted score at 83.46 has increased from 79.45 at Draft Final Bids and is slightly above 83.33 which would indicate an average of 5 (good)
- 1.17 The Trust has prepared and submitted the specific appointment business case based on the Final Bid.
- 1.18 A Preferred Bidder letter has been prepared drawing together the key points of the bid and the items remaining to be completed by final close. A draft of this letter (as at 28/07/15 is included at Appendix D).
- 1.19 This report recommends that, subject to approval of the SABC, the Trust appoint the Hospital Company as Preferred Bidder.

2. BACKGROUND

- 2.1 The Project is being procured under the UK Government's new PF2 scheme and follows the competitive dialogue procedure set out in the Public Contracts Regulations 2006. The Project was advertised by way of a contract notice published in the Official Journal of the European Union on 17 July 2014 (OJEU ref. 2014/S 135-242757).
- 2.2 PQQ responses were received from three candidates. All were evaluated and passed. The ITPD was issued to all three bidders on 5th September 2014.
- 2.3 One bidder (Balfour Beatty) withdrew immediately after issue of the ITPD. A second bidder (Momentum Healthcare) engaged in the early part of dialogue and then stopped. They had not submitted a response by the interim submission deadline of 12.00pm on 12th December and therefore are considered to have effectively withdrawn from the competition.
- 2.4 There was one response from The Hospital Co which was scored and declared to be a compliant bid.
- 2.5 The Trust conducted an option appraisal to determine the best way forward. The outcome of the appraisal was to continue the procurement with a sole bidder but to include additional requirements in the re-issued ITPD to mitigate the consequences of lack of competition.
- 2.6 The ITPD was reissued in March 2015 with an additional section of single bidder criteria (section 2.3 of ITPD volume 4). The Hospital Company formally accepted the conditions on 30th March 2015.
- 2.7 The Hospital Company submitted a Draft Final Bid on 2nd April 2015. It was evaluated and declared to be compliant.
- 2.8 The Trust gave feedback on the Draft Final Bid at the end of April and dialogue has continued throughout May and June with the objective of a) improving any areas which were scored as 3 (poor) and b) any areas which could be targeted to improve the overall scores. The GABC was prepared on the basis of the Draft Final Bid. It has now been approved by TDA, DH and HMT.
- 2.9 Dialogue was closed on 17th July 2015.

3. EVALUATION

- 3.1 The Final Bid was received on 17th July 2015.
- 3.2 The submission was given an initial examination and it was agreed that it met the price hurdles and that it was complete.
- 3.3 Over the w/c 20th July 2015 the submission was evaluated by the MMH Project Team and relevant others in accordance with the published Evaluation Methodology (see ITFB4). A list of evaluation groups and participants is included at Appendix A.
- 3.4 The groups met and achieved consensus scores which were recorded contemporaneously together with relevant evidence as to why that score was appropriate on the Trusts electronic procurement portal Bravo.
- 3.5 The submission contained a number of bid deliverables which were not updated from the Draft Final Bid. The groups scored these as at Draft Final Bid stage unless a compelling case was put forwards and recorded to change.
- 3.6 On Tuesday 28th July the Evaluation Moderation Committee met to review the scoring and as a consequence CL4.6.2 (expansion and contraction) was moderated from 4 to 5. All other scores remained as originally recorded. The committee requested that two amendments were made to the preferred bidder letter to incorporate the risk position on utility provision and to change the requirement for schedule 22 variations for Floor 9 to ward accommodation to one for wards and/or ambulatory care. These have been done.
- 3.7 Detailed below are summaries of each of the Final Bids submission scores by section, together with the Bidder's overall weighted score of 83.46.

Section	Maximum Weighted Score	Current Weighted Score Final Bids	% Final Bids	Weighted Score Draft Final Bids	% Draft Final Bids
Design Vision	9	7.65	83.33	7.05	78.33
E&T	24	19.17	78.90	17.37	72.37
Clinical	34	26.80	76.17	25.22	74.17
Legal	5	4.17	83.33	4.16	83.33
Finance	5	4.50	90.00	4.50	90.00
FM	9	7.50	83.33	7.48	83.07
Project Management	2	1.67	83.33	1.67	83.33
Regeneration	2	2.00	100.00	2.00	100.00
Pricing	10	10.00	100.00	10.00	100.00
Grand Total	100	83.46		79.45	

3.8 The bid is compliant in terms of quality scores because it has achieved an overall score of more than 50% and has no questions scored as 1 (unacceptable).

3.9 The overall weighted score of 83.46 positions the Bid just above good (83.33). There have been significant improvements across M&E and Design Vision Scores and some improved Clinical scores. No deliverables were scored as poor or below. The eight poor issues identified at Draft Final Bids are detailed in Appendix C together with details of the current score and the improvements at Final Bids.

4. SINGLE BIDDER CRITERIA

4.1 Section 2.3 of ITFB 4 sets out the additional criteria which are required to mitigate the lack of competition with a single bidder. The table below shows how the bid complies with these criteria and how the Bidder and the Trust have worked through the Dialogue period to ensure the criteria are met.

Single Bidder Criteria

Reference (ITPD v 4)	Condition	Response																				
2.3.1	<p>The Bidder agrees that they will not exceed the SPV, capex, lifecycle cost and Hard FM costs within their Interim Submission at the next stage unless specifically agreed with the Trust and their cost advisors. The costs in the base bid at Interim Submission were :</p> <table><tr><td></td><td>£'m</td></tr><tr><td>Capital Expenditure</td><td>298.6</td></tr><tr><td>Lifecycle</td><td>47.839 (real)</td></tr><tr><td>Hard FM</td><td>87.163 (real)</td></tr><tr><td>SPV</td><td>7.841</td></tr></table>		£'m	Capital Expenditure	298.6	Lifecycle	47.839 (real)	Hard FM	87.163 (real)	SPV	7.841	<p>The Final Bid figures are as shown in the following table.</p> <p>At DFB the Capex reduced to £291.8m from interim submission because of the adoption of the 33 month contract. The lifecycle increased to achieve a fund which would be acceptable to funders (as opposed to the interim submission which was based on the PSC). The Trust agreed these changes.</p> <p>At Final Bids the Trust approved the inclusion in capex of £3.6m for AGVs (on the basis of a VFM business case approved by the Trust Board) and £1.5m for remediation related costs. The financial hurdles were increased to accommodate the AGVs but not remediation which was dealt with by sculpting sub debt.</p> <table><tr><td></td><td>£'m</td></tr><tr><td>Capital Expenditure</td><td>296.98</td></tr><tr><td>Lifecycle</td><td>54.607 (real)</td></tr><tr><td>Hard FM</td><td>87.751 (real)</td></tr><tr><td>SPV</td><td>7.840</td></tr></table>		£'m	Capital Expenditure	296.98	Lifecycle	54.607 (real)	Hard FM	87.751 (real)	SPV	7.840
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2.3.2	<p>The Bidder agrees that the Interim Submission Cost Plan figures for Preliminaries, Overheads and Profit, Contingency / Risk and Design Fees will be fixed as 'not to be exceeded' values or percentages for the remainder of the procurement. (The values or percentages may be reduced at CD stage 4 but not increased). Inflation will be compared to and should not exceed the BCIS tender price index at the time of submission.</p>	<p>The relevant cost plan percentages are produced below.</p>																				

Reference (ITPD v 4)	Condition	Response																		
		<p>The minor increases in prelims and design fees are as a result of the inclusion of AGVs and Remediation in the final bid and are offset by the reduction in Bid Costs. The Trust is happy with this.</p> <table> <tr> <th></th><th>Interim submission % of Total net construction cost</th><th>Final Bid % of Total net construction cost</th></tr> <tr> <td>Bid Costs</td><td>1.45%</td><td>1.41%</td></tr> <tr> <td>Preliminaries</td><td>13.70%</td><td>13.71%</td></tr> <tr> <td>Design fees</td><td>9.93%</td><td>9.94%</td></tr> <tr> <td>Contingencies</td><td>3.41%</td><td>3.41%</td></tr> <tr> <td>Margin</td><td>8.69%</td><td>8.69%</td></tr> </table>		Interim submission % of Total net construction cost	Final Bid % of Total net construction cost	Bid Costs	1.45%	1.41%	Preliminaries	13.70%	13.71%	Design fees	9.93%	9.94%	Contingencies	3.41%	3.41%	Margin	8.69%	8.69%
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2.3.3	The Bidder agrees to 'Cost Check' submissions at two-monthly intervals during the CD4 period with a requirement for the bidder to report updated costs against the agreed elemental Cost Plan, with an explanation in each report of any variances from that Cost Plan. These "Cost Check" submissions will be subject to formal review by the Trusts cost advisors.	<p>The first planned cost check coincided with the Draft Final Bids.</p> <p>The Trusts cost advisors have met The Hospital Companies QS at fortnightly intervals since March and have reviewed all changes to costs on an open book basis.</p> <p>A report from our cost advisors on the single bidder criteria reviews is attached at Appendix B</p>																		
2.3.4	The Bidder has provided (Appendix 6) a profile of the construction spend and proposed what percentage of that spend will be market tested, tendered, benchmarked or otherwise competitively price checked by final bids. The definitions of each kind of competition are included in that	The Bidder has provided a detailed submission. Evidence of the market tests has been supplied to and checked by the Trust's cost advisors. A report from our cost advisors on the single bidder criteria reviews is attached at Appendix B																		

Reference (ITPD v 4)	Condition	Response
	<p>schedule. The Bidder agrees to provide evidence that at least the percentage of the net construction cost detailed in appendix 6 will be market tested / tendered according to the definitions detailed in appendix 6 prior to final submission and that the most economically advantageous tender will transparently form the basis for the relevant section of the elemental cost plan submitted at Final Bids. It will be acceptable to increase the percentage of a higher order of competitive check e.g. full market test at the expense of a reduction of a lower order e.g. benchmarking but not vice versa. The Trust has added a Bid Deliverable to require this information at Final Bids and it will be evaluated as a pass / fail criteria.</p>	<p>The Bidder has achieved the 84% market tested which is higher than the target of 83% in the ITFB. In addition there is a higher percentage of the higher order checks than original forecast.</p> <p>This is a compliance criteria at Final Bids and the bid is compliant.</p>
2.3.5	<p>The Bidder shall provide information at each “Cost Check” point to demonstrate value for money of the MMH capital, lifecycle and hard FM costs against those for the Royal Liverpool Hospital. This information will be subject to detailed review and challenge by the Trust’s cost advisors. The Bidder agrees that the FM non pay costs (adjusted for inflation) per m2 shall not exceed those agreed for the Royal Liverpool Hospital. The Bidder agrees that, as an upper limit, the lifecycle costs per m2 (adjusted for inflation) shall not exceed those at Royal Liverpool Hospital.</p>	<p>The FM non pay costs are £0.53 /m² less than the adjusted equivalent in RLUH (ref FM 4.4.1)</p> <p>The lifecycle costs are £1.54 /m² less than the adjusted equivalent in RLUH (ref ET 4.1.5)</p>
2.3.6	<p>The Bidder agrees to resolve all Red issues from the interim submission (included at appendix 10) and all subsequent boot camps during CD stage 4 to the Trusts satisfaction before the Draft Final Bid submission.</p>	<p>All Red Issues were resolved prior to submission of the Draft Final bids.</p>
2.3.7	<p>The Trust and Bidder agree to address Red issues arising from evaluation of interim submission at an early stage in CD4.</p>	<p>All Red Issues were resolved prior to submission of the Draft Final bids.</p>

Reference (ITPD v 4)	Condition	Response																																																																								
2.3.8	The Trust will expect the quality score for the solution achieved during evaluation at Draft Final and Final Bid stage to equal or exceed the quality score achieved at Interim Submission. If this is not the case at Draft Final Bid stage the Trust will provide detailed feedback and will expect the Bidder to improve the Bid to meet the target by Final Bids.	The weighted score at interim submission was 71.16. The weighted score at Draft Final Bid was 79.45 The weighted score at Final Bid is 83.46																																																																								
2.3.9	<p>The Trust will generate a new metric of cost (npv of UP) per benefit point from the Bidders interim submission and will expect this to reduce at draft final bids in each quality category.</p> <table><tr><th>Category</th><th>Weighted Score at Interim Submission</th><th>NPV of UP £m</th><th>Cost per point £m</th></tr><tr><td>Design Vision</td><td>75.00</td><td>308.9</td><td>4.12</td></tr><tr><td>Estates & Technical</td><td>58.75</td><td>308.9</td><td>5.26</td></tr><tr><td>Clinical</td><td>70.01</td><td>308.9</td><td>4.41</td></tr><tr><td>Legal & Commercial</td><td>70.02</td><td>308.9</td><td>4.41</td></tr><tr><td>Financial</td><td>80.02</td><td>308.9</td><td>3.86</td></tr><tr><td>Facilities Management</td><td>68.82</td><td>308.9</td><td>4.48</td></tr><tr><td>Project Management</td><td>79.15</td><td>308.9</td><td>3.90</td></tr><tr><td>Regeneration</td><td>91.60</td><td>308.9</td><td>3.41</td></tr></table>	Category	Weighted Score at Interim Submission	NPV of UP £m	Cost per point £m	Design Vision	75.00	308.9	4.12	Estates & Technical	58.75	308.9	5.26	Clinical	70.01	308.9	4.41	Legal & Commercial	70.02	308.9	4.41	Financial	80.02	308.9	3.86	Facilities Management	68.82	308.9	4.48	Project Management	79.15	308.9	3.90	Regeneration	91.60	308.9	3.41	<p>All categories of cost per benefit point reduced from Interim submission to Draft Final Bid.</p> <table><tr><th>Category</th><th>Weighted Score at Draft Final Bids</th><th>NPV of UP £m</th><th>Cost per point £m</th></tr><tr><td>Design Vision</td><td>78.33</td><td>261.7</td><td>3.34</td></tr><tr><td>Estates & Technical</td><td>72.37</td><td>261.7</td><td>3.62</td></tr><tr><td>Clinical</td><td>74.17</td><td>261.7</td><td>3.52</td></tr><tr><td>Legal & Commercial</td><td>83.33</td><td>261.7</td><td>3.14</td></tr><tr><td>Financial</td><td>90.00</td><td>261.7</td><td>2.91</td></tr><tr><td>Facilities Management</td><td>83.07</td><td>261.7</td><td>3.15</td></tr><tr><td>Project Management</td><td>83.33</td><td>261.7</td><td>3.14</td></tr><tr><td>Regeneration</td><td>100.00</td><td>261.7</td><td>2.62</td></tr></table>	Category	Weighted Score at Draft Final Bids	NPV of UP £m	Cost per point £m	Design Vision	78.33	261.7	3.34	Estates & Technical	72.37	261.7	3.62	Clinical	74.17	261.7	3.52	Legal & Commercial	83.33	261.7	3.14	Financial	90.00	261.7	2.91	Facilities Management	83.07	261.7	3.15	Project Management	83.33	261.7	3.14	Regeneration	100.00	261.7	2.62
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Reference (ITPD v 4)	Condition	Response
		<p>The table above reflects the wording of the condition in the ITPD, however the effect of the reduction in the NPV of the UP is largely due to the new term sheet issued by the Trust and this is a major influence in the size of the improvement in the metric.</p> <p>As a sensitivity we considered the proportion of the NPV of the UP to the hurdle in each submission.</p> <p>In December this was 99.97% and in April 99.89%.</p> <p>In July this increased to 99.99% although we know that £1.5m remediation works were included without exceeding the UP hurdles.</p> <p>This suggests that pricing has been stable or related to known amendments and that the evident improvement in the quality scores is a sufficient proxy for the metric adjusted to remove the pricing effect.</p>
2.3.10	The Bidder should note that the monetary and quality hurdle requirements detailed in section 5 will be strictly applied.	The Final bid is compliant with the monetary and quality hurdles.
2.3.11	The Trust has amended the programme included in this ITPD. By accepting this ITPD the Bidder is deemed to accept the programme and, to the best of its ability, commits to delivering it.	The Bidder has accepted the ITPD.
2.3.12	The Bidder is assumed to increase to at least three days access in each boot camp. The amended boot camp programme is included at appendix 2. By accepting this ITPD, the Bidder confirms that this is required / adequate to remain on course to achieve the programme included in section 3.1.	The Bidder has accepted the ITPD.

Reference (ITPD v 4)	Condition	Response
2.3.13	<p>FM and lifecycle costs in the unitary payment will be benchmarked against Royal Liverpool Hospital prior to Preferred Bidder. Lifecycle costs will be subject to early review by technical due diligence advisors. The Trust would propose requesting an amendment to clause 28 of the Project Agreement to require Project Company during the operational phase to demonstrate that they are competitively tendering their lifecycle and hard FM non pay costs above an agreed threshold and to make this information available to the Trust if requested.</p>	<p>Benchmarking against RLUH – see 2.3.5</p> <p>Lifecycle has been subject to a review by the technical due diligence advisor and their Draft Final Bid report includes the following sentence</p> <p>We have considered the life cycle costing levels against our indexed benchmarking database of similar projects. This indicates that whilst competitive, sufficient funds should be available to properly deliver the project over the longer term.</p> <p>They have classified the issue as green.</p>

5. **PREFERRED BIDDER LETTER**

- 5.1 The Trust has prepared a Preferred Bidder letter which records the basis on which the Trust agrees to appoint the Hospital Company as preferred bidder. It records key points of the bid and is clear what issues remain to be cleared before financial close, how they will be addressed and where the risk lies. The preferred bidder letter is with DH for approval and they have indicated they are broadly happy. A draft has been shared with the Hospital Company and they are willing to proceed on this basis.

6. **RECOMMENDATION**

- 6.1 Trust Board are recommended, subject to approval of the SABC, to approve the appointment of The Hospital Company as Preferred Bidder.

Alan Kenny

New Hospital Project Director

APPENDIX A – EVALUATION GROUP ATTENDEES

DATE	GROUP	ATTENDEES	APOLOGIES
20 th July 2015	Design Vision	Aziz Sahir Alan Kenny Lydia Phillips	Pam Jones Nick Bubalo Derek Connolly
20 th July 2015	Clinical & Operational	Jayne Dunn Paul Hazle Emma Loosley Lydia Phillips Graham Harris Colin Ovington Kara Blackwell Natasha Ratnaraja Steve Clarke Deva Situnayake Sarbjit Clare Jon Benham Fiona Shorney Dally Masaun	Rachel Barlow Roger Stedman
21 st July 2015	FM	Daphne Lewsley Rob Banks Kevin Reynolds Rod Knight	Roger Franklin
21 st July 2015	Project Management	Daphne Lewsley Rob Banks Kevin Reynolds Rod Knight	
21 st July 2015	Finance	Rob Banks Kevin Reynolds Tony Waite Adam Price Rod Knight Daphne Lewsley	
21 st July 2015	Capital Costs/SOA/Construction Evaluation	Daphne Lewsley Alan Kenny David Beale Rob Banks Rob Sturla	
21 st July 2015	Legal	Daphne Lewsley Carly Caton	
22 nd July 2015	Architecture	Rob Banks David Beale Graham Harris Parmjit Nila	
22 nd July 2015	IM&T	Rob Banks David Beale Martin Lynch	

DATE	GROUP	ATTENDEES	APOLOGIES
22 nd July 2015	Equipment Commissioning	& Rob Banks David Beale Lawrence Barker Andrew Frost Gill Gadd	
22 nd July 2015	M&E	Rob Banks Kevin Reynolds Alan O'Rourke	

Appendix B

Sweetts Report on Market Testing and open book review

Sandwell & West Birmingham NHS Trust

Midland Metropolitan Hospital Project

Market Testing Report

24 July 2015

Job number: N3630

Originated by: Rob Sturla

Contents

1.0 Introduction

2.0 Market Testing Packages

3.0 Market Testing Programme

4.0 Market Testing Review

Appendices

Appendix A ☐ Market Testing Programme

Appendix B ☐ Market Testing Spreadsheet

Appendix C ☐ Final Bid Capital Cost Pro Forma

1.0 Introduction

The purpose of this report is to follow the methodology used by Sweett and Carillion in terms of the Market Testing Strategy.

It was a requirement of the ITPD4 as referenced by Appendix 6 of that document that 83% of the net construction cost should be market tested.

2.0 Market Testing Packages

The market testing documents take the form of subcontractors and/or suppliers quotations, budgets and schedule of rates as required by the categories agreed for the market testing strategy. These are highlighted in Appendix B at the top of the spreadsheet and are detailed below:

1	True market test lump sum
	package scope documents are issued to supply chain in sufficient detail to attract lump sum quotations.
	Subcontractors provide lump sum based on their own assessment of quantities and design solution where applicable.
	Subcontractors to allow contingencies for risk and uncertainties
	Carillion will consider and plug items excluded or qualified
	Design documents include sufficient drawings and specifications to clearly brief requirements
	Market testing evidence will be in the form of a lump sum quotation comparison with Carillion adjustments to achieve compliance
	number of suppliers will depend on package value and available supply chain
2	True market test rates only
	Package enquiry documents issued to supply chain to attract a schedule of rates
	Sufficient design information issued to communicate an approximate scope / size of project for suppliers to assess capability and estimate prelims and overheads
	Carillion will estimate approximate quantities and apply SC rates + on-costs
	Quantity estimate will vary depending on design information available
	Where quantities cannot be clearly established from available designs, they will be estimated by referring to benchmark projects.
	Additional allowance will be made for predicted quantity growth during future design detailing. E.g. Internal doors
	Where specifications are lacking, prices will be invited based on previous projects
	Market testing evidence will be in the form of a Carillion measured price build-up based on SC rates

3	SC target cost / budget estimate
	This method will be used where design will rest with the subcontractor, or where insufficient design is available and SC are invited to put forward an estimate based on their experience.
	Carillion will work with suppliers to establish uncertainty and risk retained in the budget cost and make allowance to cover future design development.
	Carillion will assess the robustness of budget estimates and will include the cost of a preferred supplier, based on Carillion's confidence in their solution being the right balance of price v quality
	Market testing evidence will be in the form of a Carillion cost build up supported by SC budget estimates
4	quality / capability evaluation with all in rate for sample scope of works
	This method will be used for higher risk packages or packages where early contractor input is needed
	Carillion would normally select contractors with limited price competition in this situation on PFI bids
	examples include insitu concrete frame, envelope facades etc.
	To help evidence price competition contractors would be invited to submit a budget estimate, based on a sample scope of works.
	The total of the scope of works will not be used to value the works package, but used for an aspect of a MEAT evaluation of the contractor selected
	Where this method is used in reference to NG Bailey selection, no sample pricing will be available, as their selection is part of our consortium. We could however compare their on costs to others.
	The package value will be built up in collaboration with the SC who will work towards establishing a GMP
	Market testing evidence will be in the form of a sample priced scope of works priced by multiple SCs
5	use RLUH market testing of rates and adjust for inflation
	An alternative to sending out enquiries for suppliers to provide rates (as described in option 2)
	Where design information is unavailable, an assumed solution will be taken from a more advanced design on RLUH
	Market testing carried out on RLUH will prove current competition in the rates
	an adjustment will be made to re-base market tested rates to the base date for MMH
	Market testing evidence will be in the form of a comparison schedule of rates supported by copies of suppliers quotes relating to RLUH
	MEP rates from other P21 projects can be used in a similar way applied to estimated quantities; see notes below

	Equipment pricing will be gathered from various recent hospital procurement exercise. Ie. Evidence of supplier prices to validate the allowances within our equipment schedule.
6	rely on benchmarking / estimator assessment
	RLUH was won in competition very recently and provides robust transparent data for pricing MMH. We believe that where elements are in line with RLUH costs for elements this demonstrates VfM , assuming market conditions have not diminished. We also believe that market conditions have improved since RLUH was tendered and therefore rates from RLUH are better VfM than would otherwise be achieved through simple market testing at present day.

3.0 Market Testing Programme

Over the course of the last few months as shown in Appendix A ☐ Market Testing Programme Sweett Group and Carillion have met fortnightly to review the various packages in detail to satisfy that the obligations as set out in the ITPD4 have been met.

Each package was evidenced in terms of the categories as set out from 1 to 6 described above. The number of subcontractors or suppliers was also reviewed and stated in the spreadsheet in Appendix B.

4.0 Market Testing Review

Following a final review of the remaining packages with Carillion on 1st July the actual percentage market tested was 84% as shown in Appendix B under the column☐ July Final bid Position☐.

At this point the percentage increase of Category 1 costs has increased from 12% (ITPD target figure) to 25% at Final Bid Position.

In addition the benchmarking percentage (Category 6) has decreased from 17 to 16%. This provides more certainty of cost on the MMH design solution.

The total spend profile at the final bid stage includes the cost of Active ICT and AGV☐s as instructed by the Trust and is therefore a higher total than at the interim bid stage when ICT and AGV☐s were not included.

The Cost Plan shown in Appendix C issued at final bid stage links the market tested packages. These figures are then shown in elemental format across the various tabs in the spreadsheet. This provides a direct link between the cost plan and the market tested packages.

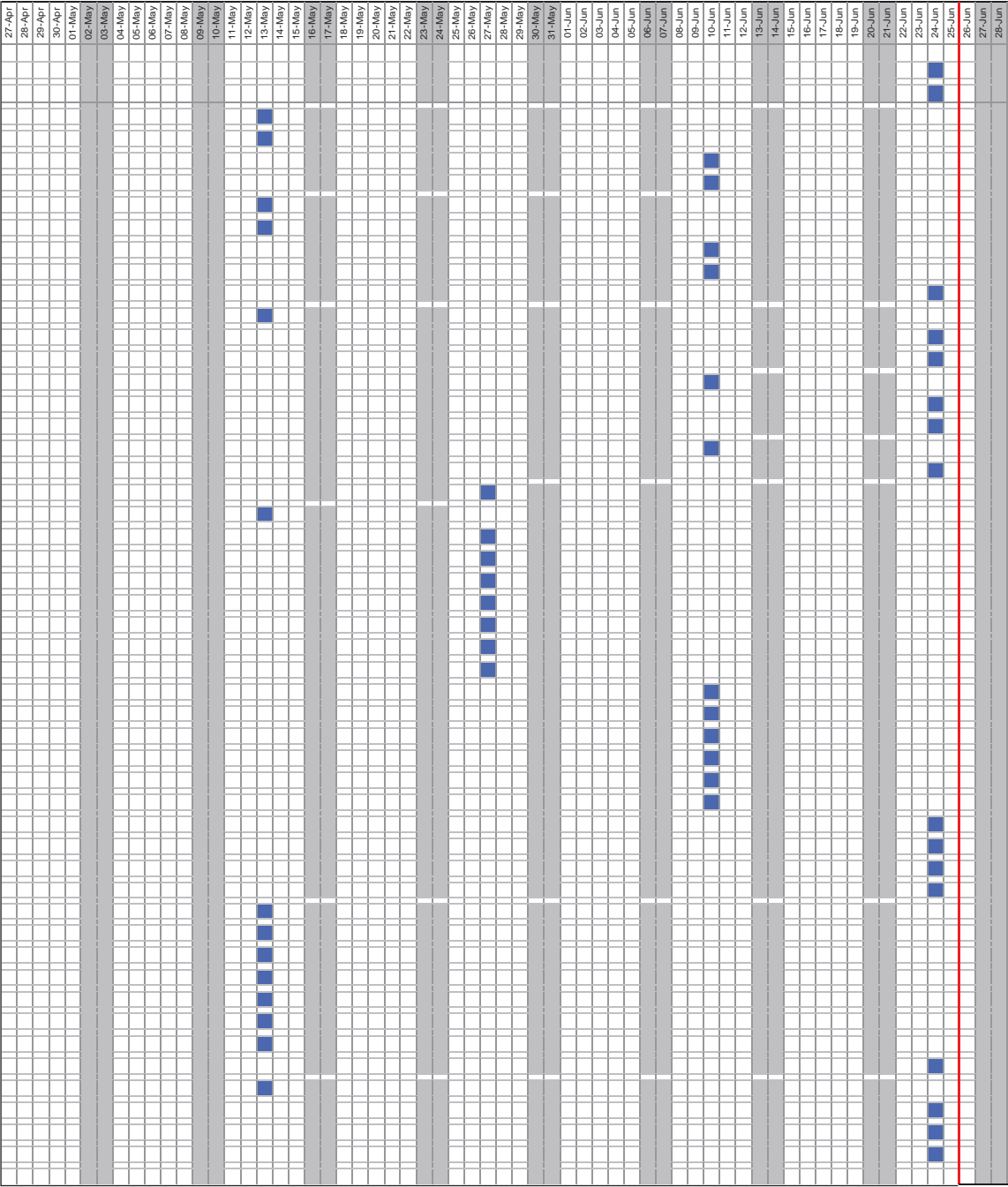
Subsequent to concluding our discussions with Carillion regarding the market testing strategy they included an allowance for the residual remediation following the completion of the site remediation works by the Trust. This has been included under package code 2030 and under code 6 as it has not been market tested.

This late adjustment has reduced the total amount the total amount tested to 83% which is still in line with the planned percentage.

Appendices

Appendix A - Market Testing Programme

ref	Package name	start	finish		
2250	Retaining walls	24-Jun	24-Jun		
2300	groundworks	24-Jun	24-Jun		
2350	Piling	13-May	13-May		
2400	Concrete frame	13-May	13-May		
2800	steel frame to level 10	10-Jun	10-Jun		
2801	structural steel bracing	10-Jun	10-Jun		
2850	Atrium structure	13-May	13-May		
2860	Atrium cores structure	13-May	13-May		
3000	Fire protection	10-Jun	10-Jun		
3002	Steel stairs	10-Jun	10-Jun		
3200	External facades	24-Jun	24-Jun		
3201	Atrium envelope	13-May	13-May		
3204	Shutter doors and barriers	24-Jun	24-Jun		
3600	Roof finishes	24-Jun	24-Jun		
3700	brickworks and blockworks	10-Jun	10-Jun		
3800	Partitions and drylining	24-Jun	24-Jun		
3820	Glazed screens and partitions	24-Jun	24-Jun		
3830	Cold rooms	10-Jun	10-Jun		
3910	Abseil rails etc	24-Jun	24-Jun		
4000	Ceilings	27-May	27-May		
4200	PODs	13-May	13-May		
4305	Screeding	27-May	27-May		
4310	Hard tiling	27-May	27-May		
4320	Car park floor paint	27-May	27-May		
4350	Soft flooring	27-May	27-May		
4352	Entrance matting	27-May	27-May		
4375	Hard wall finishes	27-May	27-May		
4395	Hygienic and sheet wall finishes	27-May	27-May		
4400	Internal doors	10-Jun	10-Jun		
4410	Steel doors	10-Jun	10-Jun		
4420	Glass doors	10-Jun	10-Jun		
4450	Atrium fit out	10-Jun	10-Jun		
4550	Handrails and balustrades (internal)	10-Jun	10-Jun		
4555	Handrails and balustrades (roof)	10-Jun	10-Jun		
4800	Painting	24-Jun	24-Jun		
4960	Wall protection	24-Jun	24-Jun		
5350	Kitchen equipment	24-Jun	24-Jun		
5910	Equipment	24-Jun	24-Jun		
7400	Lifts	13-May	13-May		
8100	Hard landscaping	13-May	13-May		
8200	Soft Landscaping	13-May	13-May		
8210	Soft Landscaping on building	13-May	13-May		
8300	Drainage	13-May	13-May		
8400	Roads and Pavings	13-May	13-May		
8500	Fencing and gates	13-May	13-May		
8510	Street furniture	24-Jun	24-Jun		
8611	BWIC external services	13-May	13-May		
8800	Canal works	24-Jun	24-Jun		
8801	External bridges and ramp structures	24-Jun	24-Jun		
	MEP packages	24-Jun	24-Jun		



Appendix B ☐ Market Testing Spreadsheet

Market testing strategy		April '15 bid submission Target		July '15 bid confirmation Target		April '15 bid submission W/P		Position at end May 15		Position at 10 June		July Final Bid position		July final Bid position with £1.5m added for remediation	
						02 April 2015		27 May 2015		10 June 2015		02 July 2015		10 July 2015	
1	True market test lump sum	12,818,869	6%	24,091,094	12%	14,321,394	7%	43,048,200	21%	43,048,200	21%	50,223,911	25%	50,223,911	24%
2	True market test rates only	36,072,523	18%	97,076,714	49%	58,236,414	29%	47,404,782	23%	66,212,273	32%	72,296,849	35%	72,296,849	33%
3	SC target cost / budget estimate	34,565,659	17%	14,824,776	7%	41,151,409	20%	491,520	0%	834,520	0%	18,291,978	9%	18,291,978	9%
4	quality / capability evaluation with all in rate for sample scope of w	47,514,937	24%	17,667,716	9%	16,901,932	8%	-	-	-	-	21,989,615	11%	21,989,615	11%
5	use RUSH market testing of rates and adjust for inflation	24,849,722	12%	12,087,623	6%	26,201,282	14%	2,689,214	1%	3,102,901	2%	8,105,793	4%	8,105,793	4%
Market tested subtotal		155,461,710	78%	165,747,923	83%	158,812,432	78%	93,633,716	46%	113,197,894	56%	170,908,146	84%	170,908,146	83%
6	rely on benchmarking / estimator assessment	44,097,365	22%	33,811,152	17%	45,127,621	22%	22,928,821	11%	22,928,821	11%	33,031,908	16%	34,136,698	17%
		199,559,075	100%	199,559,075	100%	203,940,053	100%	116,562,536	57%	136,126,714	67%	203,940,053	100%	205,044,844	100%
all indicative costs only, used only to calculate MT %								-							

	Sub	Description	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Notes
			April '15 bid submission ITPD Plan			July '15 bid confirmation			April '15 bid submission W/P Market testing			Current position at end May 15			Position at 17 June			Final position 02 July			July Final Bid position with £1.5m added for remediation			
		Packages	199,559,075			199,559,075			203,940,053			203,940,053			203,940,053			203,940,053			205,044,844			
1	2030	Enabling and Remediation Works	-			-			-			-			-			-			-			
1	2200	Bulk Excavation	-	2	2	-	2	2	-	2	2	-	2	2	-	2	2	-	2	2	-	2	2	
1	2250	Retaining walls	-	2	2	-	2	2	-	2	2	-	2	2	-	2	2	-	2	2	-	2	2	
1	2300	Groundworks and substructure	8,415,538	2	2	8,415,538	2	2	10,607,097	2	2	10,607,097	2	2	10,607,097	2	2	10,607,097	2	2	10,607,097	2	2	brickwork shown in separate build up
1	2350	Piling	3,829,264	1	3	3,829,264	1	3	1,979,278	1	3	1,979,278	1	3	1,979,278	1	3	1,979,278	1	3	1,979,278	1	3	
1	2400	In situ concrete structural frame	31,080,221	4	3	31,080,221	2	1	31,564,339	2	3	31,564,339	1	4	31,564,339	1	4	31,564,339	1	4	31,564,339	1	4	
1	2401	Precast concrete frame components	2,308,000	2	3	2,308,000	1	3	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	
1	2410	In situ concrete composite floor slabs to wards	-	2	2	-	2	2	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	
1	2800	Structural Steelwork frame to wards	215,000	2	3	215,000	1	3	236,520	5	3	236,520	3	2	236,520	3	2	236,520	6	2	236,520	9	2	sent 1 Jul
1	2801	Structural Steelwork - SECONDARY IN STRUCTURES - bracing etc	-	6	-	-	6	-	646,500	4	-	646,500	-	-	646,500	2	1	646,500	2	1	646,500	2	1	
1	2805	Structural Steelwork - SECONDARY IN ENVELOPE	475,000	6	-	475,000	6	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2810	Structural Steelwork - SECONDARY IN FIT OUT	73,847	6	-	73,847	6	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	-	
1	2850	Atrium structure	3,275,550	3	2	3,275,550	1	2	1,599,750	1	2	1,599,750	1	2	1,599,750	1	2	1,599,750	1	4	1,599,750	1	4	sent 1 Jul
1	2860	Atrium core structures	-	3	2	-	3	2	1,145,666	3	2	1,145,666	1	2	1,145,666	1	2	1,145,666	8	2	1,145,666	8	2	categorised as benchmarked due to number of plugged items
1	3000	Fire Protection to steel frame	30,000	2	3	30,000	2	3	52,544	6	3	52,544	2	2	52,544	2	2	52,544	2	2	52,544	2	2	
1	3001	Stair structures - PCC flights	7,500	2	3	7,500	2	3	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	
1	3002	Stair structures -Steel flights	-	-	-	-	-	-	255,000	3	3	255,000	3	3	255,000	3	3	255,000	6	3	255,000	9	3	
2A	3100	envelope cladding infills to car park perimeter	-	3	2	-	3	2	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3200	External facades	17,785,859	3	2	17,785,859	2	2	19,527,077	3	2	19,527,077	2	2	19,527,077	2	2	19,527,077	2	2	19,527,077	2	2	
2A	3210	External facades to ward floors	-	3	2	-	3	2	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3201	Atrium envelope	4,383,675	3	2	4,383,675	1	2	2,831,850	1	2	2,831,850	1	2	2,831,850	1	2	2,831,850	1	2	2,831,850	1	2	
2A	3202	Entrance canopies - main entrance, ED and ambulance	-	1	2	-	1	2	-	1	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3204	Car park shutters and barriers	36,000	1	2	36,000	1	2	36,000	6	2	36,000	2	-	36,000	2	-	36,000	2	2	36,000	2	2	
2A	3206	Curtain Walling to car park entrance hall and front elevation	-	2	2	-	2	2	-	6	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3215	Louvers	-	2	2	-	2	2	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3250	Rendered facades	-	5	2	-	5	2	-	5	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3260	SFS	-	3	2	-	3	2	-	3	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3400	scaffolding	280,000	3	1	280,000	3	1	-	3	1	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3500	Windows within masonry or rendered walls	30,000	2	2	30,000	2	2	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	
2A	3510	External Doors (General)	164,150	2	2	164,150	2	2	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	
2B	3600	Roof Finishes - generally	5,881,350	2	3	5,881,350	2	3	4,515,490	2	3	4,515,490	2	3	4,515,490	2	3	4,515,490	2	3	4,515,490	2	3	
2B	3610	Roof membranes - hot melt inverted roof systems	-	2	3	-	2	3	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	
2B	3620	Green Roofs	-	2	3	-	2	3	-	2	3	-	-	-	-	-	-	-	-	-	-	-	-	
2B	3700	Brickwork & Blockwork External walls	467,400	2	2	467,400	2	2	1,122,056	2	2	1,122,056	2	3	1,122,056	2	3	1,122,056	2	3	1,122,056	2	3	
3A	3800	Drylining & Plastering	6,510,604	5	3	6,510,604	2	3	5,628,140	5	3	5,628,140	2	3	5,628,140	2	3	5,628,140	2	3	5,628,140	2	3	set position on prems
3A	3820	Glazed Partitions	2,330,475	5	2	2,330,475	2	2	313,687	5	2	313,687	2	3	313,687	5	2	313,687	5	2	313,687	5	2	sent 1 Jul
3A	3830	COLD ROOMS	31,763	5	-	31,763	3	-	160,000	5	-	160,000	5	1	160,000	5	1	160,000	5	1	160,000	5	1	
3A	3840	smoke curtains	310,805	1	2	310,805	1	2	318,288	6	2	318,288	6	-	318,288	6	-	318,288	6	-	318,288	6	-	
4B	3900	Builderswork (Firestopping & Sealing)	1,479,124	6	-	1,479,124	6	-	1,943,961	6	-	1,943,961	6	-	1,943,961	6	-	1,943,961	6	-	1,943,961	6	-	
2A	3910	Building maintenance provision - abseil rails bmu etc	100,000	3	1	100,000	3	1	100,000	6	1	100,000	5	1	100,000	6	1	100,000	6	1	100,000	6	1	
3A	4000	Suspended Ceilings	2,885,810	2	3	2,885,810	2	3	2,939,132	5	3	2,939,132	2	3	2,939,132	2	3	2,939,132	2	3	2,939,132	2	3	
3A	4200	Prefabricated Toilet Pods	2,520,000	2	2	2,520,000	2	2	4,070,790	5	2	4,070,790	2	3	4,070,790	2	3	4,070,790	2	3	4,070,790	2	3	
3A	4305	Screeding	229,903	2	2	229,903	2	2	2,116,470	5	2	2,116,470	2	3	2,116,470	2	3	2,116,470	2	3	2,116,470	2	3	
3A	4310	Epoxy or terrazzo flooring	194,793	5	-	194,793	2	2	474,792	5	-	474,792	2	2	474,792	2	2	474,792	2	3	474,792	2	3	
3A	4320	Car park painted floor finishes	-	-	-	-	-	-	288,353	6	-	288,353	2	3	288,353	2	3	288,353	2	3	288,353	2	3	
3A	4350	Vinyl Floors	3,513,584	2	3	3,513,584	2	3	1,920,157	5	1	1,920,157	2	3	1,920,157	2	3	1,920,157	2	3	1,920,157	2	3	
3A	4352	Carpet and entrance matting	224,609	2	3	224,609	2	3	60,000	5	3	60,000	2	3	60,000	2	3	60,000	2	3	60,000	2	3	
3A	4353	Acoustic wall finishes to atrium	232,498	2	2	232,498	2	2	268,520	6	2	268,520	6	-	268,520	6	-	268,520	6	-	268,520	6	-	
3A	4375	Hard Wall Finishes	159,112	5	-	159,112	5	-	93,076	5	-	93,076	2	2	93,076	2	2	93,076	2	2	93,076	2	2	
3A	4395	Hygienic and sheet wall finishes	116,464	5	-	116,464	2	-	127,980	5	-	127,980	2	1	127,980	2	1	127,980	2	2	127,980	2	2	
3A	4400	Doors, Frames & Ironmongery - TIMBER	2,711,080	2	2	2,711,080	2	2	2,641,852	5	2	2,641,852	2	2	2,641,852	2	2	2,641,852	2	2	2,641,852	2	2	
3A	4410	Doors, Frames & Ironmongery - STEEL	222,340	2	2	222,340	2	2	76,650	5	2	76,650	2	-	76,650	2	-	76,650	2	2	76,650	2	2	
3A	4420	Doors, Frames & Ironmongery - GLASS	159,439	2	2	159,439	2	2	512,000	5	2	512,000	2	-	512,000	2	-	512,000	2	1	512,000	2	1	
3A	4430	Doors, Frames & Ironmongery - Theatres	-	2	2	-	2	2	-	5	2	-	-	-	-	-	-	-	-	-	-	-	-	
3A	4435	Doors, Frames & Ironmongery - shutters and gates	5,000	2	2	5,000	2	2	-	2	2	-	-	-	-	-	-	-	-	-	-	-	-	
3A	4445	General Joinery	828,542	6	-	828,542	6	-	745,000	6	-	745,000	6	-	745,000	6	-	745,000	6	-	745,000	6	-	
3A	4450	Atrium fit out and finishes	1,038,775	3	1	1,038,775	2	2	343,000	3	1	343,000	3	2	343,000	3	2	343,000	6	2	343,000	8	2	
3A	4510	General Metalwork ENVELOPE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
3A	4550	Handrails & Balustrades (INTERNAL)	1,008,871	2	2	1,008,871	2	2	2,122,001	2	2	2,122,001	2	2	2,122,001	2	2	2,122,001	2	2	2,122,001	2	2	
3A	4555	Handrails & Balustrades (ROOF)	75,000	2	2	75,000	2	2	326,768	2	2	326,768	2	2	326,768	2	2	326,768	2	2	326,768	2	2	
3A	4800	Painting & Decorating	1,225,351	2	2	1,225,351	2	2	1,887,185	5	2	1,887,185	2	4	1,887,185	2	4	1,887,185	2	4	1,887,185	2	4	
3A	4960	Wall Protection	539,213	6	-	539,213	3	-	564,															

Market testing strategy		April '15 bid submission Target		July '15 bid confirmation Target		April '15 bid submission W/P		Position at end May 15		Position at 10 June		July Final Bid position		July final Bid position with £1.5m added for remediation	
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4	quality / capability evaluation with all in rate for sample scope of w	47,154,937	24%	17,667,716	9%	16,901,932	8%	-	-	-	-	21,989,615	11%	21,989,615	11%
5	use RLHM market testing of rates and adjust for inflation	24,849,722	12%	12,087,623	6%	28,201,282	14%	2,689,214	1%	3,102,901	2%	8,105,793	4%	8,105,793	4%
Market tested subtotal		155,461,710	78%	165,747,923	83%	158,812,432	78%	93,633,716	46%	113,197,894	56%	170,908,146	84%	170,908,146	83%
6	rely on benchmarking / estimator assessment	44,097,365	22%	33,811,152	17%	45,127,621	22%	22,928,821	11%	22,928,821	11%	33,031,908	16%	34,136,698	17%
		199,559,075	100%	199,559,075	100%	203,940,053	100%	116,562,536	57%	136,126,714	67%	203,940,053	100%	205,044,844	100%
all indicative costs only, used only to calculate MT %								-							

CPT	Sub	Description	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Notes		
			April '15 bid submission ITPD Plan			July '15 bid confirmation			April '15 bid submission W/P Market testing			Current position at end May 15			Position at 17 June			Final position 02 July			July Final Bid position with £1.5m added for remediation		
Packages			199,559,075			199,559,075			203,940,053			203,940,053			203,940,053			203,940,053			205,044,844		
1	8800	Canal works	350,000	6		350,000	3		300,200	6		300,200	6		300,200	6		300,200	6				
1	8801	External Bridges & Ramp Structures							490,000	6		490,000	6		490,000	6		490,000	6				
1	9999	Adjustments / sundry allowance / VE	1,168,480	6		1,168,480	6		-	6		-			-	6		-	6				
MEP Packages									-			-			-			-					
4A	6080	all MEP bucket							38,434,893	6		14,898,572	6		14,898,572	6		14,898,572	6				
4A	MM011	Air Handling Units	750,000	2	3	750,000	2	3	2,684,811	2	3	2,684,811		3	2,684,811		3	2,684,811	2	3	2,684,811	2	3
4A	MM013	Fans	80,000	6		80,000	6		-			-			-	6		-	6		-	6	
4A	MM013A	High Temperature Extract Fans	60,000	3	2	60,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	MM013B	Fume Extract Fans	4,000	3	2	4,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	MM014A	HEPA Filters	8,000	3	2	8,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	MM015	Noise Control	82,000	6		82,000	6		-			-			-	6		-	6		-	6	
4A	MM016	Grilles/Diffusers/Louvers	145,000	6		145,000	4		-			-			-	4		-	4		-	4	
4A	MM018	Car Park ventilation	36,000	6		36,000	6		360,000	3		360,000			360,000			360,000	1	3	360,000	1	3
4A	MM018A	Variable & Constant Volume Box	60,000	6		60,000	3		-			-			-	3		-	3		-	3	
4A	MM018B	Duct Mounted Coils	30,000	6		30,000	3		-			-			-	3		-	3		-	3	
4A	MM018C	Pressure Relief Dampers	40,000	5		40,000	3		-			-			-	3		-	3		-	3	
4A	MM018D	Fume Cupboards	10,000	3	2	10,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	MM018F	Fire Smoke Dampers & Panels	870,000	6		870,000	6		-			-			-	6		-	6		-	6	
4A	MM018G	Heat Recovery Units	200,000	6		200,000	3		-			-			-	3		-	3		-	3	
4A	MM031	Chillers	1,000,000	1	3	1,000,000	1	3	-		3	689,200			689,200			689,200	1	3	689,200	1	3
4A	MM033	Fan Coil Units/Terminal Units	440,000	6		440,000	4		-			-			-	4		-	4		-	4	
4A	MM033A	Fan Convectors	3,000	6		3,000	6		-			-			-	6		-	6		-	6	
4A	MM033B	Chilled Beams	600,000	6		600,000	6		-			-			-	6		-	6		-	6	
4A	MM040	Bollers	450,000	1	3	450,000	1	3	-		3	250,000			250,000			250,000	1	3	250,000	1	3
4A	MM043	Heat Exchangers	45,000	6		45,000	3		-			-			-	3		-	3		-	3	
4A	MM045A	Electric Water Heaters	4,000	2	3	4,000	2	3	-		3	-			-	2	3	-	2	3	-	2	3
4A	MM045C	Calorifiers	90,000	2	3	90,000	2	3	-		3	-			-	2	3	-	2	3	-	2	3
4A	MM047	CWP Units	800,000	1	3	800,000	1	3	-		3	420,000			420,000			420,000	1	2	420,000	1	2
4A	MM049A	Radiators	10,000	6		10,000	4		-			-			-	4		-	4		-	4	
4A	MM049B	Fan Convectors	3,000	6		3,000	6		-			-			-	6		-	6		-	6	
4A	MM049C	Unit Heaters	3,000	6		3,000	6		-			-			-	6		-	6		-	6	
4A	MM049D	Radiant Panels	180,000	4	2	180,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	MM049F	Trench Heating	8,000	4	2	8,000	4	2	-		2	-			-	4	2	-	4	2	-	4	2
4A	MM049G	Air Curtains	18,000	5		18,000	3		-			-			-	3		-	3		-	3	
4A	MM050	Circulating Pumps	200,000	6		200,000	3		272,633	2		272,633			272,633			272,633	1	3	272,633	1	3
4A	MM051	Booster Sets	55,000	5		55,000	3		-			-			-	3		-	3		-	3	
4A	MM051A	Gas Boosters	12,000	5		12,000	3		-			-			-	3		-	3		-	3	
4A	MM052	Pressurisation Units	45,000	5		45,000	3		-			-			-	3		-	3		-	3	
4A	MM056	Pump Ancillaries	50,000	5		50,000	5		-			-			-	5		-	5		-	5	
4A	MM060A	Steel Pipework & Fittings	1,000,000	6		1,000,000	6		-			-			-	6		-	6		-	6	
4A	MM060B	Copper Pipework & Fittings	900,000	6		900,000	6		-			-			-	6		-	6		-	6	
4A	MM060C	Cast Iron Pipework & Fittings	420,000	6		420,000	6		-			-			-	6		-	6		-	6	
4A	MM060D	Plastic Pipework & Fittings	250,000	6		250,000	6		-			-			-	6		-	6		-	6	
4A	MM061	Valves	950,000	6		950,000	6		-			-			-	6		-	6		-	6	
4A	MM062	Pipeline Components	80,000	6		80,000	6		-			-			-	6		-	6		-	6	
4A	MM062A	Water Meters	24,000	5		24,000	5		-			-			-	5		-	5		-	5	
4A	MM062B	Gas Meters	12,000	5		12,000	5		-			-			-	5		-	5		-	5	
4A	MM062C	Heat Meters	26,000	5		26,000	5		-			-			-	5		-	5		-	5	
4A	MM062D	Air & Dirt Separators	18,000	5		18,000	3		-			-			-	3		-	3		-	3	
4A	MM070	Sanitary Ware	1,500,000	5	2	1,500,000	5	2	1,132,615	2	2	1,132,615		2	1,132,615		2	1,132,615	2	2	1,132,615	2	2
4A	MM090	Dry Risers	140,000	5		140,000	3		-			-			-	3		-	3		-	3	
4A	MM120A	Physical Water Conditioner	30,000	5		30,000	3		-			-			-	3		-	3		-	3	
4A	MM163	Rainwater Harvesting	26,000	6		26,000	3		-			-			-	3		-	3		-	3	
4A	MM101	Fixings, Brackets & consumables & carriage	230,000	6		230,000	6		-			-			-	6		-	6		-	6	
4A	MM500MA	Buffer Vessel	40,000	3	2	40,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	MM906	Gas/Fuels/Chemicals	20,000	6		20,000	6		-			-			-	6		-	6		-	6	
4A	SM017	External Mains Installation	220,000	1	3	220,000	1	3	-		3	-			-	1	3	-	1	3	-	1	3
4A	SM020	Fuel Systems Installations	190,000	3	2	190,000	1	2	-		2	-			-	1	2	-	1	2	-	1	2
4A	SM022	Medical Gas Installations	2,500,000	6		2,500,000	3		-			2,835,000			2,835,000			2,835,000	6	2	2,835,000	6	2
4A	SM024	Refrigeration & DX Systems	150,000	6		150,000	3		-			-			-	3		-	3		-	3	
4A	SM025	Flue & Chimney Installations	170,000	3	2	170,000	1	2	-		2	361,244			361,244			361,244	1	2	361,244	1	2
4A	SM026	Trace Heating & Leak Detection	25,000	6		25,000	4		-			-			-	4		-	4		-	4	
4A	SM030A	Sprinklers	1,000,000	3	2	1,000,000	3	2	3,600,000	3	2	3,600,000		2	3,600,000		2	3,600,000	1	2	3,600,000	1	2
4A	SM030C	Gas Fire Suppression	60,000	3	2	60,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	SM033	Hydrant Installation	200,000	3	2	200,000	2	2	-		2	-			-	2		-	2		-	2	
4A	SM037	Fire Protection Installations	2,500,000	6		2,500,000	6		-			7,300,000			7,300,000			7,300,000	8	1	7,300,000	8	1
4A	SM040	Thermal Insulation	1,800,000	6		1,800,000	6		-			-			-	6		-	6		-	6	
4A	SM061	Tank Installation	50,000	3	2	50,000	1	2	-		2	-			-	1	2	-	1	2	-	1	2
4A	SM080	Controls	3,000,000	6		3,000,000	6		-			-			-	6		-	6		-	6	
4A	SM220	Testing & Commissioning (Mech)	280,000	6		280,000	6		-			-			-	6		-	6		-	6	
4A	XXXXXXA	GSPH	680,000	3	2	680,000	1	2	-		2	-			-	1	2	-	1	2	-	1	2
4A	-	Pneumatic Tube	260,000	6		260,000	6		-			-			-	6		-	6		-	6	
4A	ME010	Switchgear HV	510,000	1	3	510,000	1	3	-		3	-			-	1	3	-	1	3	-	1	3
4A	ME014	Switchgear LV	1,700,000	3	2	1,700,000	3	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	ME014C	Distribution Boards	250,000	3	2	250,000	2	2	-		2	-			-	3	2	-	3	2	-	3	2
4A	ME021	Lighting - External	630,000	6		630,000	3		240,000	3		240,000			240,000			240,000	2	1	240,000	2	1
4A	ME022	Lighting - Emergency	580,000	4	2	580,000	3	2															

CPT	Sub	Description	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Current Total	MT definition	No of suppliers	Notes			
			April '15 bid submission TPD Plan			July '15 bid confirmation			April '15 bid submission WIP Market testing			Current position at end May 15			Position at 17 June			Final position 02 July			July Final Bid position with £1.5m added for remediation			
Packages			199,559,075			199,559,075			201,940,053			201,940,053			201,940,053			203,940,053			205,044,844			
AA	MED30	Busbar Mains Distribution	42,000	3	2	42,000	3	2	-	2	2,880,401	-	2	2,880,401	-	2	2,880,401	6	1	2,880,401	6	1		
AA	MED32	Busbar Underfloor	16,000	3	2	16,000	3	2	-	2	-	-	-	-	-	-	-	3	2	-	-	3	2	
AA	MED45	Off site modules	310,000	6		310,000	6		6,000,000	3	6,000,000	6,000,000		6,000,000	4	1	6,000,000	4	1	6,000,000	4	1		
AA	MED46	Containment - PVC	36,000	6		36,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	MED47	Conduit - Steel	90,000	6		90,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	MED50	Cable - Armoured	2,000,000	6		2,000,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	ME051	Cable - Singles	250,000	6		250,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	MED52	Cable Fire Performance	220,000	6		220,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	ME060	Wiring Accessories	190,000	6		190,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	ME090	Control Equipment	80,000	6		80,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	ME100	Appliances	200,000	6		200,000	6		-	-	-	-	-	-	-	-	-	6		-	6			
AA	SE010C	Generator System	1,800,000	1	3	1,800,000	1	3	2,368,300	1	3	2,368,300		3	2,368,300		3	2,368,300	1	2	2,368,300	1	2	
AA	SE010D	LPS System	220,000	1	3	220,000	1	3	-	3	-	-	-	-	-	-	-	1	3	-	-	1	3	
AA	SE070	Earthing/Lightning Protection	245,000	3	2	245,000	3	2	-	2	37,173	-	2	37,173	-	2	37,173	3	2	37,173	3	2		
AA	SE0B0A	Fire Alarm System	1,440,000	3	2	1,440,000	3	2	-	2	1,384,609	-	2	1,384,609	-	2	1,384,609	3	2	1,384,609	3	2		
AA	SE0B0C	Induction Loop System	40,000	3	2	40,000	3	2	-	2	-	-	-	-	-	-	-	3	2	-	-	3	2	
AA	SE0B0N	CTV System	300,000	4	2	300,000	4	2	-	2	604,065	-	2	604,065	-	2	604,065	3	3	604,065	3	3		
AA	SE0B0I	Access Control System	450,000	4	2	450,000	3	2	-	2	465,613	-	2	465,613	-	2	465,613	3	3	465,613	3	3		
AA	SE0B0U	Intruder System	140,000	4	2	140,000	3	2	-	2	-	-	-	-	-	-	-	3	2	-	-	3	2	
AA	SE0B0K	Intercom System	42,000	4	2	42,000	3	2	-	2	-	-	-	-	-	-	-	3	2	-	-	3	2	
AA	SE0B0L	Voice & Data Installation	3,000,000	5		3,000,000	2		2,285,000	3		2,285,000			2,285,000			2,285,000	-	1	2,285,000	-	1	
AA	SE0B0M	Nurse Call System	800,000	6		800,000	3		-		1,765,148	-		1,765,148	-		1,765,148	3	2	1,765,148	1	2		
AA	SE0B0N	Bedhead Trunking System	650,000	6		650,000	3		-		-	-	-	-	-	-	-	3		-	-	3		
AA	SE0B0O	TV/Radio/Satellite System	21,000	6		21,000	3		-		-	-	-	-	-	-	-	3		-	-	3		
AA	SE0B0P	Public Address (PA)	45,000	6		45,000	4		-		-	-	-	-	-	-	-	4		-	-	4		
AA	SE210A	Sub-Contract Cable Pulling	28,000	6		28,000	6		-		-	-	-	-	-	-	-	6		-	-	6		
AA	SE210A	Modular Wiring	2,750,000	6		2,750,000	6		-		-	-	-	-	-	-	-	4		-	-	4		
AA	LABM	Labour Mech	6,000,000	6		6,000,000	6		-		-	-	-	-	-	-	-	6		-	-	6		
AA	LABE	Labour Elec	5,000,000	6		5,000,000	6		-		-	-	-	-	-	-	-	6		-	-	6		
AA	P	Prelims, on-costs plant etc	14,374,716	4	1	14,374,716	4	1	16,255,432	4	1	14,374,716		1	14,374,716		1	14,374,716	4	1	14,374,716	4	1	
AA	SE250	BMS							3,000,000	3		3,000,000			3,000,000			3,000,000	3	3	3,000,000	3	3	
AA	NGB01	Active ICT							1,614,899	1	1	1,614,899			1,614,899			1,614,899	4	1	1,614,899	4	1	
3A	AGV	AGV supply and install							2,440,917	3		2,440,917	6		2,440,917	6		2,440,917	6	6	2,440,917	6	6	
		Specialist equipment from ERM							2,689,214	3		2,689,214	5		2,689,214	5		2,689,214	5	1	2,689,214	5	1	
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Appendix C □ \$YDLODEOH RQ 5HTXHVW

Appendix C

TECHNICAL EVALUATION MMH SCORES OF 3 OR LESS IN APRIL 2015						
			JULY 2015 FB		APRIL 2015 DFB	
Section	Question	Description	FB Unweighted Score	Response	DFB Unweighted Score	Response
Design Vision	DV4.3	(*) Achievement of the Design Vision Value 3: 'Reassuring' Bidders are asked to respond to this statement: 'The environment feels calm and professional. High quality design and materials create expectation of high quality health services. Users of the building will feel safe and confident in the care they will receive.' Narrative describing how the Design Vision Value 3: 'Reassuring' has been achieved in the design proposals. This will take the form of a report giving clear, objective evidence of the achievement of the Design Vision Value. Examples will be provided using images, sketches and simple diagrams. Maximum of 6 sides of A4. [Narrative and images presented in PDF format.]	5	Clearly focused on concerns previously addressed. Improved significantly, risers reduced, first impressions from visitors point of view has improved significantly. Space has been broken up in a positive way to enable it to have a number of functions: resaurant, private space, child friendly areas. Not awarded a 6 as a 6 can only be achieved by how the Trust dresses and fits out the space provided.		3 Concern over the additional risers at Main Reception Level 5 which creates restricted access and view of reception desk. Until this issue is resolved we do not feel we can score this any higher.
E&T	ET4.1.4	(*) FB Forms (using the same methodology as the DCA and On-Cost method within the Design Brief costs) [Standard NHS FBC Forms 1-4 WITH On-Costs linked to Cost Plan.]	5	The forms are in an acceptable format		3 Submission to be clarified with Carillion. FB forms now received but not complete.
E&T	ET4.1.6	(*) Lifecycle Cost Report: To demonstrate how assessments of optimising Whole Life Cost (i.e. achieving optimum value in terms of capex, lifecycle cost and FM costs) have been reflected into the design proposals. [Formal report]	5	The document is far more complete and detailed response giving specific examples for the MMH Project. Life expectancies have the appropriate periods stated.		3 The submission is not sufficiently specific as it stands. The Trust intends to ask for further clarification.
E&T	ET4.5.1	(*) Engineering services design philosophy to include: Detailed description of the proposals for all engineering systems including elements required to achieve the target BREEAM Healthcare Excellent Score under ENE01, Planning Authority requirements and energy target compliance; Detailed appraisal to show environmental performance and how occupant comfort levels will be achieved Schedule of proposed plant and equipment suppliers indicating specific model or range to enable an assessment to be made of the quality of the proposed equipment. The schedule shall provide life cycle information and any specialist abnormal maintenance requirements; Compliance statement for Building Regulations relevant to the engineering systems installations; Evidence of consultation with the Environment Agency regarding emissions from the facility and integration of renewable energy technologies if the technology relies on use of certain natural resources; Description detailing opportunities in delivering and future maintenance of the engineering installations in an efficient and safe manner without effecting business operation; Detail the approach to standardisation of the design and system selection Submit a strategy detailing water conservation techniques as part of the design solution [Written report including schedule drawings and calculations. (maximum 50 sides A3)]	5	Submission addresses the Trust Core Requirements. There is an agreed list of derogations in place which have been accepted by the Trust.		3 Derogations such as TMV serving multiple outlets and external roof plant. Non-conformance with S8P3 in respect of general distribution strategy.
E&T	ET4.5.5	(*) Layouts for all services within the specific departments to be selected by the Trust during bid development (CL4.0). Layouts to be fully co-ordinated with the architectural room loaded drawings submitted and to indicate: 1:200 scale co-ordinated services routing throughout the department with 1:50 scale cross-sections through "pinch points" including details of the structural frame and slabs; Sizing of services distribution and containment; Lighting layouts with supporting calculations for each room and a schedule of proposed luminaries; Co-ordinated reflected ceiling plans showing all M&E systems terminal devices, ceiling grid and type, ceiling height, access panels, fixed clinical equipment including supports penetrating the ceiling; Key notes on continuation of services outside of the department where not shown on 1:200 scale plans noted in section D3.4.4, i.e. routes and termination provisions for MRI helium quench pipes and fume cupboard ducts etc. [A1 sized layouts.]	5	Comprehensive set of lighting calculations supplemented with detailed RCPs. Addresses the Trust Requirements. The Trust has concern regarding positioning of the Chilled Beam in the Single Bedrooms.		3 Luminaire report is generic and no supporting calculations. RCP for a single bed ward only. General concerns over access to future services zone as detailed in the co-ordinated cross-section.
E&T	ET4.5.10	(*) External Lighting Layouts including: 1:200 scale plans; Schedule of proposed fittings; Supporting calculations; Rendered images. [A1 sized layouts and A4 sized supporting information.]	5	Supplementary information has been provided which offers a more comprehensive response to this deliverable. Noting lighting level on the pathways across the green to be considered during the next phase.		3 No 1:200 plans, no supporting calculations and limited MMH specific rendered images.
E&T	ET4.5.21	(*) Life cycle statement detailing estimates for major items of plant and key distribution system components. [Written report including drawings and calculations (maximum 50 sides A3)]	5	Improved response to lifecycle addressing previous omissions.		3 Omission of reference to replacement lifecycling of ventilation systems and medical gases, hot and cold water services and sprinkler system.
Clinical	CL4.8.2	(*) Functional Content Bidders to provide functional content with as drawn areas per department shown against the Trust's brief and to highlight any areas of deviation from the Trust's Brief along with reasons for deviation. [1:500 whole hospital drawings & Schedule of Accommodation Spreadsheet]	4	Meets the Brief but recognises concerns about shape and size of some rooms		3 Concern about ensuite and single bathroom sizes. However during recent dialogue, Carillion have indicated an error and written confirmation being sought.

APPENDIX D
Preferred Bidder Letter

YELLOW HIGHLIGHT INDICATES NOT YET AGREED WITH CARILLION (28/07/15)

Our Ref: PB Letter

[Date]

For the attention of Austin Bell (The Hospital Company Bid Director)

The Hospital Company
3rd Floor
25 Maddox Street
London
W1S 2QN

Dear Austin

Midland Metropolitan Hospital - PREFERRED BIDDER LETTER

Following the submission of your final bid on 17th July 2015 (the "**Final Bid**") I am writing to you to set out the position now agreed with The Hospital Company, comprising Carillion Private Finance Ltd, together with Carillion Construction Ltd, Carillion (AMBS) Ltd (the "**Consortium**") and Sandwell & West Birmingham Hospitals NHS Trust (the "**Trust**").

This letter sets out the terms on which the Trust is authorised to and, subject to satisfaction of the condition in the following sentence, will appoint the Consortium as its preferred bidder. Appointment as preferred bidder shall be conditional on receiving from the Consortium by way of countersignature, confirmation of acceptance of the terms of this appointment and the Final Bid.

The Trust would like to express its thanks for all the effort the Consortium has made to date and the Trust looks forward to working with you to achieve financial close.

A GENERAL

- 1** The basis for the preferred bidder appointment is the Final Bid.
- 2** The Consortium confirms by way of countersignature to this letter that each member of the Consortium (and/or any of their respective advisors), has raised all points on the legal, technical, financial and commercial documents circulated to the Consortium during the bid period and that it has accepted and has priced all elements (commercial, financial and associated risk) of the Trust's requirements in the Final Bid and that there are no further points any member of the Consortium wishes to raise except as stipulated in this letter.
- 3** The period from preferred bidder appointment to financial close is the final stage of the competitive dialogue procedure. The requirements under the EU procurement rules, in particular Regulation 18 of the Public Contracts Regulations 2006 (as amended), at this stage of the procedure are that the Consortium will only be permitted to modify aspects of its Final Bid where this is requested by the Trust or as

previously discussed and agreed during dialogue, provided this does not have the effect of modifying substantial aspects of the Final Bid and does not risk distorting competition or causing discrimination.

- 4 The Consortium and the Trust agree to build on the relationship of reasonableness and “no surprises” developed in the procurement to date.
- 5 The Consortium will work together with the Trust in good faith to:
 - 5.1 incorporate into Schedule 13 any updates in relation to the Equipment Responsibility Matrix and developments to the equipment schedule during design development
 - 5.2 complete the remediation and testing of the Grove Lane site to confirm the final value of the remediation related works to be undertaken by the Consortium
 - 5.3 confirm a final valuation of the remediation works no later than [20th September 2015]
 - 5.4 in so far as the value of the works specified in A5.2 is less than £1.5m , adjust the capital value in the financial model resulting in a proportionate reduction in the Service Payment
 - 5.5 in so far as the value of the works specified in A5.2 may be greater than £1.5m identify the best value solution and find offsetting savings to ensure the inclusion the model current at the time does not increase the UP
 - 5.6 complete the Advanced Works agreement in accordance with the principles set out in the Final Bid
 - 5.7 provide full scale mock ups of key/ critical rooms as identified within Schedule 8 , Part 4 and also reflected in D6 of this letter

B FINANCE

1 Service Payment and Financial Model:

1.1 The Service Payment is fixed by reference to the financial model incorporated as part of the Final Bid as appended at Appendix 1 (the “**Financial Model**”), and on the assumption that financial close occurs on or before 9th June 2016 (“**Fixed Bid Price Expiry Date**”). The Consortium, having taken advice from its advisors and in signing this letter, confirms that they believe the Project to be bankable. It is recognised that funding terms (and, potentially, certain structural aspects of the preferred bidder’s commercial solution) that could not have been reasonably foreseen or anticipated will be determined in the PBDFC (“**Preferred Bidder Debt Funding Competition**”), recognising the Final Bid was predicated on a standard commercial bank debt solution. Amendments to costs in the Financial Model will therefore be restricted to those that result directly from the outcome of the funding competitions and adoption of an alternative funding solution to that envisaged in the Financial Model.

1.2 The Financial Model submitted includes a Service Payment as follows:

Unitary Charge 2019/20	% of Unitary Charge subject to Indexation
£22.272m	40%

1.3 The Financial Model reflects the ABC (“**Appointment Business Case**”) approval made by the Department of Health (DH) and HM Treasury.

- 1.4 You agree to work with the Trust in good faith to reach financial close on or before 9th December 2015 ("**Planned Financial Close Date**"). In the event that financial close is not achieved by the Fixed Bid Price Expiry Date and provided that the failure to achieve such date is not caused or materially contributed to by the Consortium members (and/or any of their respective advisors), the costs in the Financial Model will be uplifted as set out in Appendix 4 (*Impact of Delay on Planned Financial Close Date*).
- 1.5 The Consortium confirms that the input costs to the Financial Model shall remain as the Final Bid. No increase to the Service Payment shall be permitted in respect of any item including, without limitation, changes in underlying assumptions, except where the changes reflect differences in the funding terms and any changes in structure, security package and third party costs directly caused by the difference in the funding terms but only to the extent that such changes could not have been reasonably foreseen or anticipated and are not the result of an error or misunderstanding in the Consortium's assumptions, subject to the same allowance made in paragraph B1.1 recognising that the Financial Model was predicated on a standard commercial bank debt solution, as established through the PBDFC, compared with those funding terms and other items assumed in the Financial Model, then any such changes shall be permitted. Whilst acknowledging that the costs of a bond funded solution are not included in the Financial Model the Trust expects that any costs to the SPV resulting from a change to a bond funded solution are within those set out in response to F4.1.3 of the Final Bid. No additional costs will be considered.
- 1.6 The Financial Model reflects the funding term sheet contained in the Final Bid. The nominal post SPV tax pre-shareholder tax blended equity return will be updated solely for the outcome of the equity funding competition and will be incorporated into the financial model as a standalone amendment and in accordance with the approach to the equity funding competition as agreed with Infrastructure UK ("IUK") and the Trust on 26 May 2015 . The same equity return +/- 2bps for optimisation will remain unchanged unless the Trust confirms its acceptance to a change in the risk profile agreed at Final Bid.
- 1.7 Subject to the issues specifically addressed in this letter, all cost assumptions associated with implementing the complete funding structure as set out in the Final Bid, (including due diligence costs instructed by the Trust) have been included within the Financial Model provided that:
- 1.7.1 If the European Investment Bank ("EIB") requires additional and/or separate advice then the following costs are accepted not to be in the Financial Model:
- The cost of EIB expenses and separate legal advice reasonably required by, and provided to EIB; and
 - Any separate or additional work required to be carried out by the funders' due diligence advisers (for the avoidance of doubt restricted to Willis, Ashurst and MAMG), that is excluded from their terms of appointment.

- 1.7.2 If procurement of the Independent Tester demonstrates that their costs are lower than or greater than the £600,000 already provided by the Trust for inclusion in the financial model shall be amended.
- 1.7.3 The model includes due diligence costs based on a bond solution. If this proves not to be the solution the costs will be reduced accordingly.

No other costs or fees will be payable.

- 1.8 The Consortium confirms that all required financing sensitivities have been performed on the Financial Model, as could reasonably be expected by the funders. The Consortium also confirms that the results of these sensitivities comply with the requirements set out in the Trust's Invitation to Participate in Dialogue and as could reasonably be expected by the funders. You are not aware of any further sensitivities that would be required by funders.
- 1.9 Any changes required to the Financial Model, outwith the results of the funding competition, will be agreed with the Trust prior to inclusion in the Financial Model and an audit trail in the form of Proforma FP8 from the Financial Model will be maintained by the Consortium detailing the changes and the effect on the Service Payment.
- 1.10 The logical integrity (including, without limitation, all calculations and outputs) used within the Financial Model remains the responsibility of the Consortium and forms the agreed basis of the pricing. The Consortium confirms that in aggregate no adverse changes to the Service Payment will be accepted by the Trust arising from any amendments to and/or alteration of such logical integrity and/or assumptions relating to taxation or accounting treatment. If the net effect of errors which are identified in the Financial Model (and subsequent revised models) prior to financial close would result in a lower price, 100% of the net saving shall be returned to the Trust by way of a reduction to the Service Payment.
- 1.11 The Trust wishes to have access to the model audit report (on a non-reliance basis) and looks to the preferred bidder to allow such as part of any contract into which it enters with the model audit firm.
- 1.12 Active ICT maintenance costs in relation to the service described in schedule 14 Part 2 – Network Services Specification are included in the Financial Model on a pass through basis and will therefore be financed separately by the Trust.

2 Funding Competition and Financial Close

- 2.1 The Consortium will accept novation of the engagement of the Due Diligence Advisors from the Trust immediately following signature of this Preferred Bidder Letter.
- 2.2 The Consortium shall comply with the agreed DH Funding Competition Protocol which shall be set out within a detailed "**Funding Competition Methodology**" prepared by the Consortium and approved by the Trust.

- 2.3 The Consortium, in consultation with the Trust, shall ensure the Stage 1 Funding Competition considers a range of bank and bond providers (public and private placements) in order to test the value for money, affordability and deliverability of different financial products. Where a potential funding partner has an offer which is likely to prove affordable and deliverable, it will be considered in full (i.e. detailed terms reviewed and modelled to demonstrate the impact on price compared to other modelled solutions).
- 2.4 The Consortium shall manage the Stage 2 Funders' Due Diligence Advisors review.
- 2.5 Subject to clause B1.7 it is the Consortium's responsibility to manage the Funders' Due Diligence Advisors review (in consultation with the Trust and other stakeholders) in a manner that assures the Due Diligence Advisors (and potential funders) of the acceptability of the Final Bid without reverting to the Trust for alterations to the agreement or pricing. Changes required by the Due Diligence Advisor(s) or funder(s) which are due to assumptions and positions taken by the Consortium in the Final Bid will be addressed by the Consortium at your cost.[Note :As part of the agreement of schedule 18 issues the Trust requested permission to reinstate clause 44.3c . IUK refused. The issue now becomes one for THC to restructure its subcontracts to assure the DDA]
- 2.6 The Funding Competition Methodology describes the agreed evaluation methodology.
- 2.7 For the avoidance of doubt, where potential funders other than the EIB require additional and/or separate advice as contemplated in 1.7 above, these costs must be included in their submission to the Funding Competition and will not be reflected separately by any amendment to the Financial Model. The Funding Competition Methodology makes this clear to all potential funders.
- 2.8 The Consortium confirms that any improvements in funding terms (after taking into account any structural or other costs (but only as contemplated in paragraph B1.1 of this letter) expended in implementing the improved funding terms) over those stated in the Financial Model achieved before financial close will be passed to the Trust, in full, through any resulting reduction to the Service Payment.
- 2.9 At financial close, inputs to the Financial Model will be updated in accordance with the DH Funding Competition Protocol and the Service Payment amended on an open book basis such that the Service Payment is minimised. The Consortium will work with the Trust and its financial advisors to ensure the Financial Model is optimised (at each model run) so as to minimise the Service Payment. This optimisation will be performed with reference to, but may not be limited to:
- [●]% of Unitary Charge indexation¹;
 - Adherence to funder cover ratio requirements;
 - Senior debt sculpting; and
 - Equity (including subordinated debt) repayment profiles.

¹ This will be updated post DFC- lower cost of debt leads to a higher % of UP being indexed to ensure necessary inflation sensitivities for debt and equity are achieved

- 2.10 The Financial Model will be run to produce a nominal post SPV tax pre-shareholder tax blended equity return as currently calculated no higher than 12.00% +/- 2bps for optimisation and which does not compromise the funders' cover ratios.
- 2.11 The Consortium shall provide open book information and allow the Trust's financial advisors to undertake benchmarking as required, for example of the relevant swap/GILT rates and/or deposit instruments, at financial close in line with the market at the time through an agreed benchmarking exercise.

C COMMERCIAL/LEGAL

- 1 By way of countersignature of this letter, the Consortium accepts the Draft Project Agreement and Schedules issued 17th July 2015 and included with the ITFB ("**Final Bid PA**") in its entirety and without amendment save for those issues shown in Appendix 3 of this letter as not yet finalised ("**Outstanding Matters**")
- 2 The Consortium agrees that those parts of the Final Bid PA marked as "agreed" in Appendix 3 are not to be re-opened other than to correct factual inaccuracies, insert cross references and/or complete necessary information which was not previously available.
- 3 The Consortium acknowledges that the re-opening of issues on the Final Bid PA by the Consortium, (or any members of the Consortium or any sub-contractors; and each of their respective advisors) other than the Outstanding Matters, the correction of factual inaccuracies and the completion of cross references and necessary information may be considered a breach of the terms of this letter and may be contrary to what is permissible under the Competitive Dialogue procedure, in which case the Trust may have to withdraw the preferred bidder status.
- 4 Agreement of the Outstanding Matters shall not result in any increase to the Service Payment and will not give rise to any other cost related or consequential issues. Neither will any agreement increase the risk and liability of the Trust or result in any substantive changes.
- 5 The Consortium fully accepts the Payment Mechanism contained in Schedule 18 of the Final Bid PA and the principles of the Functional Areas and Functional Units Table ("**FAFU Table**") set out in Schedule 18 (subject to appendices 3 & 7 of this document). The FAFU Table and Appendix B of Schedule 18 shall be updated to reflect the agreed design solution using a similar approach (principles, risk and level of deductions) to the current FAFU table and Appendix B [Note: This was part of the agreed position in the Schedule 18 issues agreement and the Trust do not intend to move away from it] . The Consortium will need to resolve any outstanding issues with respect to their sub-contract arrangements if required by the Due Diligence advisor without recourse to the Trust or the PA. [Note: this sentence is here precisely because of clause 44.3c. The Trust did its part in making the request of IUK and was quite clear that this was as far as it could go. The position now becomes one for THC to resolve by restructuring the termination periods in the sub contracts]
- 6 The Consortium accepts the calculation of deductions for Unavailability Events as set out in Schedule 18, including the use of the Capital Contribution Adjustment Factor based on the ratio of what the Service Payment would have been without the Capital

Contribution and the Service Payment with the Capital Contribution (currently £100m).

- 7 The sub-contract documentation issued by the Consortium as part of the Final Bid is subject to final clarification and confirmation by the Trust and the Shadow Funder Due Diligence Advisors (legal, technical and insurance). Any changes to the sub-contract documentation agreed shall not have the effect of modifying any substantive aspect of the Final Bid so that there is no distortion of the competition or any discrimination caused. The Consortium confirms that each of its proposed sub-contractors has accepted the form of draft sub-contract in the Final Bid (acknowledging the need for updating in line with the updated PA).
- 8 The Consortium and the Trust will work together to implement the technical PF2 contractual changes advised by IUK in July 2015 and attached at Appendix 9.

D TECHNICAL

- 1 The Consortium confirms acceptance of the Trust's Construction Requirements (Schedule 8, Part 3) save for amendments that may be required in order to consolidate any bid derogations as agreed at contract and financial close. The Consortium confirms that all aspects of their design and construction proposals as described in the Final Bid have been fully costed in the Financial Model.
- 2 The Consortium confirms that Project Co Proposals (Schedule 8, Part 4) shall be updated to incorporate the relevant design information submitted in the Consortium's response to the Bid Deliverables and the schedule of minimum requirements set out in the Schedule 8 Part 4 in the Final Bid PA. The Consortium confirms that Project Co Proposals shall contain technical information only and shall not change the risk profile as set out in the Final Bid and shall be subject only to further calibration in order to meet the Trust's Construction Requirements agreed at Final Bid. The Consortium confirms that the Trust's Construction Requirements (as amended pursuant to paragraph D1 above) shall take precedence in respect of any further calibration of Project Co Proposals.
- 3 The Consortium agrees to develop the design documentation at no additional cost to the Trust. In particular and by Financial Close, the Consortium will develop and obtain Trust approval of a complete set of 1:200 departmental plans, and an agreed set of fully loaded 1:50s, C-Sheet drawings and associated Room Data Sheets for the whole of the new hospital development, together with all supporting architectural, engineering, civil and structural drawings, schedules and specifications in accordance with the Trust's Construction Requirements. The Consortium confirms all costs to fully develop the scheme are included within the Final Bid price submitted.
- 4 The Consortium agrees to provide regular updates during design development on the BOQ and component placement schedules in addition to RDS sheets.
- 5 The Trust has not been provided with component placement schedules during dialogue and has therefore been unable to check that the Consortium included A2 equipment quantities which meet the Trusts Construction requirements. Any errors discovered following the appointment of Preferred Bidder will be at the Consortiums risk.[Note: This clause remains until the component placement schedule has been checked]
- 6 The Consortium will construct / complete construction of full size mock ups as required in Table 6 ITFB2 stage 4 (reproduced below) by the end of September 2015

to allow the Trust to engage stakeholders in the 1:50 process. The Trust will ensure that sufficient space is made available within the mock up building (fully available and decommissioned ready for the Mock Ups to be constructed) by 10th August to achieve the end of September completion date. [Note: need to discuss locations and dates further

Mock Up Room Type	Required Level at PB Stage Design Deliverables
<ul style="list-style-type: none"> 4 bed bay with en-suite 	<p>Space sizes; internal and external window locations; ceiling & finishes and bed head and IPS location with dummy medical gas, power and data outlet locations.</p> <p>Completely fitted out rooms with doors, cubicle curtains; bed head services outlets, IPS, sink and tapware. Loose furniture by Trust.</p>
<ul style="list-style-type: none"> Staff base 	<p>Template size boxed out using plywood or dry lining with dummy power and data outlet locations.</p> <p>Sample desk with services provided as part of colour/review.</p>
<ul style="list-style-type: none"> One Size Fits All wc (OSFA) 	<p>Size and dummy sanitary fixtures in place to show grab rails etc. Completed with grab rails and ceilings.</p>
<ul style="list-style-type: none"> Isolation Single bedroom with en-suite and lobby 	<p>Space sizes. Complete with typical internal and external window location, privacy arrangements; ceiling and finishes; bed head services outlets, sanitary ware, shower, IPS, sinks and tapware, Loose furniture by Trust.</p>
<ul style="list-style-type: none"> Treatment room 	<p>Space Standard with privacy arrangements, dummy workstation, examination space, data and power services outlets, IPS, sink and tapware. Loose furniture by Trust.</p>
<ul style="list-style-type: none"> Clean utility 	<p>Space Standard with dummy storage units, data and power services outlets, IPS, sink and tapware. Loose furniture by Trust.</p>
<ul style="list-style-type: none"> Dirty utility 	<p>Space Standard with dummy storage units, data and power services outlets, IPS, sink and tapware. Loose furniture by Trust</p>
<ul style="list-style-type: none"> Neonatal Level 3 cot space 	<p>Space standard with dummy pendants with dummy medical gas, power and data outlet locations, fixtures . Loose furniture by Trust</p>

All products will be of a typical standard representative of the finished product to be selected as part of the ongoing design development process and /or as part of the RDD process for the relevant products identified within Schedule 8, Part 5.

- 7 In addition the Consortium will provide a full size mock-up of a theatre suite by the end of September 2015. The Trust will ensure that sufficient space is made available within the mock up building (fully available and decommissioned ready for the Mock Ups to be constructed) by [10th August] to achieve the end of September completion date. [Note: need to discuss locations and dates further]

Mock Up Room Type	Required Level
<ul style="list-style-type: none"> Theatre Suite to include operating theatre, anaesthesia room, critical care cubicles, scrub and preparation rooms. 	<p>Full size mock up constructed to enable testing and for staff to gain assurance with regard to functionality, compliance with critical dimensions, layouts with fixed fixtures, fittings and equipment. Critical standards to be tested eg engineering and environmental services, infection control and prevention</p>

All products will be of a typical standard representative of the finished product to be selected as part of the ongoing design development process and /or as part of the RDD process for the relevant products identified within Schedule 8, Part 5.

- 8 The Consortium will work with the Trust to resolve issues and inaccuracies identified by the Trust during its evaluation of Final Bids and included on the issues list at Appendix 8.
- 9 The Consortium confirms agreement to the energy provisions within the Final Bid PA (and in particular clauses 17.3, 17.3A, 17.3B and 17.4, 17.4A and 17.4B) pursuant to which the Consortium assumes the energy volume risk for the new hospital development and the Trust retains energy tariff risk. The Consortium confirms a target of not greater than 42 GJ/100m³/annum and will deliver a low carbon solution to achieve an excellent rating under ENE 01 as defined by BREEAM Healthcare 2011
- 10 The Consortium confirms that it will work with the Trust to further develop and, where appropriate finalise transitional arrangements in a form consistent with HMT guidance.
- 11 The Consortium confirms that in the event the Trust requires a material change in the specifications, any consequential change in the Service Payment will be agreed on an open book basis by an amount that reflects the marginal change required to the variable costs, overheads, preliminaries and profits attributable to the specification(s) so changed, including lifecycle and maintenance (but excluding calculations of economies of scale) attributable to the change.
- 12 The Consortium will complete their negotiations with primary infrastructure suppliers. The responsibility for ensuring that all necessary supplies to the site are delivered in a manner which meets their obligations under the Project Agreement lies with the Consortium. The Trust will be involved in these negotiations and will be responsible for payment of the final amount to the Utility companies.
- 13 The Consortium will work with the Trust prior to Financial Close to include a costed variation in Schedule 22 in the event that the Trust wishes to fully develop Floor 9 as [wards/ ambulatory care departments] during the first five years of the operational term. The variation will include the base capex/ opex /lifecycle costs with an agreed way to apply appropriate inflation indices at the time. Actual legal and lender/ financing costs will be agreed and added at the time.

E INSURANCE

- 1 In the event that financial close is delayed up to the Fixed Bid Price Expiry Date there shall be no change in the Insurance Costs in the Final Bid. If financial close is delayed beyond the Fixed Bid Price Expiry Date, then with effect from the Fixed Bid Price Expiry Date onwards the Construction Phase Insurance Costs may be changed, but only to the extent required either as a consequence of any change in the sum insured following any change in the Construction Costs allowed in accordance with Appendix 4 (*Impact of Delay on Planned Financial Close Date*) or as agreed. Any adjustment will be by reference to the actual change in the cost of cover and the Consortium will share on an open book basis the final broker's quotes (and supporting information) for said insurances on or around financial close. The parties

will agree an appropriate market testing process and the market tested costs shall be substituted in the Financial Model.

- 2 For the avoidance of doubt, there shall be no changes to the Operational Phase Insurance Costs as any such change shall be considered after financial close in accordance with the Premium Cost Sharing Mechanism set out in the Final Bid Project Agreement.

F APPROVALS

- 1 The Consortium is aware of the importance of the ABC and the need for the Trust's compliance with any approval conditions. The Trust will only execute the contracts for this Project if it is able to confirm to HM Treasury and the DH that this transaction remains within the terms of this letter, the Final Bid and the ABC approval and a Confirmation Business Case is approved. If any of the approval conditions are breached, such elements will require re-appraisal with no certainty of final approval.
- 2 If the Consortium breaches the parameters of this letter and/or the Final Bid then the Trust reserves the right to withdraw preferred bidder status. On the occurrence of any such breach, if the Trust chooses not to withdraw preferred bidder status from the Consortium, there shall be no increase in the Service Payment and the Consortium shall be responsible for the costs of any delay arising as a result of any re-appraisal.

G TIMETABLE TO FINANCIAL CLOSE

- 1 The Consortium agrees to continue to respond to the Trust's reasonable requirements in an efficient and cost effective manner. The Consortium agrees to work in partnership with the Trust and is committed to dedicate such resources to the Project as are necessary in order to achieve financial close by the Planned Financial Close Date.
- 2 The Consortium acknowledges and agrees to the timetable set out in Appendix 2 (Key Activities to Financial Close) (the "**Financial Close Timetable**") and:
 - 2.1 The Trust will comply with its responsibilities set out in the Financial Close Timetable in order to achieve the Planned Financial Close Date save for where such compliance is unachievable as a result of the Consortium failing to meet its obligations as set out in this letter.
 - 2.2 The Consortium will:
 - 2.2.1 comply with its responsibilities under the Financial Close Timetable in order to achieve the Planned Financial Close Date;
 - 2.2.2 fully participate in the actions and deliver all relevant documentation required from it in accordance with the agreed planning timetable; and
 - 2.2.3 obtain planning permissions and discharge prior to financial close any conditions to be discharged by financial close for which the Consortium has responsibility.

- 3 To the extent that the Consortium is in breach of paragraph 2.2, the costs of any impact or delay caused by failure to obtain planning permission will be borne by the Consortium and will not result in additional costs for the Trust except where such delay is caused by the Trust not meeting its obligations under paragraph 2.1 and only to the extent that any such Trust delay has a direct impact on the Consortium meeting its obligations under paragraph 2.2.
- 4 The Consortium confirms that it has included within the Final Bid all costs in relation to all works required to satisfy any planning conditions in accordance with Schedule 8 (Part 1) of the Final Bid PA and that all risk in securing planning for the Project and all associated costs (except for those relating to S106 or S278 agreements) rest with the Consortium.
- 5 The Consortium agrees to work with the Trust in association with the planning authority to agree the appropriate definition and scope of the S278 works and to agree a cost effective method of provision of those works. We acknowledge that these works are not included in the Final Bid.
- 6 The Trust accepts that there a number of planning conditions which are the Trusts responsibility to deliver but which are captured in Schedule 8, Part 1
- 7 The Trust agrees to assist the Consortium (as reasonably requested) in obtaining all planning permissions prior to financial close.
- 8 Financial close will not occur until after the judicial review period for planning has passed.
- 9 Acceptance of the Financial Close Timetable is acknowledged by the Consortium as being a key requisite for the Trust in appointing the Consortium as preferred bidder. A detailed programme to financial close identifying and planning the finalisation and agreement of all project documentation will be developed by the Consortium and subsequently agreed between the Consortium and the Trust within two weeks of appointment of the Consortium as preferred bidder.
- 10 The Consortium and the Trust (and any of their advisors) agree to commit fully to the approval process and the timetable to achieve financial close by the Planned Financial Close Date.
- 11 In order to ensure the timetable agreed between the Consortium and the Trust pursuant to paragraph 7 is adhered to, the Consortium agrees to maintain continuity of the bid team and the Consortium advisors for the duration of the preferred bidder stage and thereafter as set out in Schedule 4 to the finally agreed Project Agreement.

H ACCEPTANCE OF TERMS

- 1 By countersigning this letter the Consortium confirms:
 - 1.1 the positions set out in Sections A to H (inclusive) of this letter; and
 - 1.2 that each member of the Consortium is fully committed to achieving the Planned Financial Close Date and accepts, and will work to, the Financial Close Timetable.

- 2 Authorised representatives of the Consortium’s legal, financial, and insurance advisors should sign the letter of acknowledgment set out at Appendix 5 and deliver to the Trust on the same date as this letter.

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- 3 Authorised representatives of the Consortium should sign the Certificate of Good Standing as set out at Appendix 6 and deliver to the Trust on the same date as this letter.
- 4 Authorised representatives of each member of the Consortium should countersign this letter where indicated below to confirm its approval of the terms set out in this letter and appointment as preferred bidder.
- 5 This letter may be signed in one or more counterparts that together shall be read as one document. The letter will be dated with the date the last signatory to sign the letter signs it.

.....
Signed on behalf of the Trust

Name: Mr Toby Lewis
Title: Chief Executive

.....
Signed on behalf of The Hospital Company

Name:

Title:

Name:

Title:

Name:

Title:

Name:

Title:

APPENDIX 1
FINANCIAL MODEL

The Financial Model as referred to within Section B, paragraph 1.2

APPENDIX 2
KEY ACTIVITIES TO FINANCIAL CLOSE

Key Milestones	Date	Responsibility
PB Letter/ABC Approval	6.08.2015	Project Co/Trust
Funding Competition Selection	1.10.2015	Project Co/Trust
Planning Committee Decision	23.09.2015	N/A
Expiry of Judicial Review Period following Planning Permissions	6.11.2015	N/A
Planned Financial Close Date	9.12.2015	Project Co/Trust

In addition to the above, the parties will work together in good faith to produce a detailed timetable and supporting documents list and programme to achieve the key milestone dates (to include having all documents in a final agreed form at the earliest possible date).

APPENDIX 3 STATUS OF SCHEDULES

The following table is against the Project Agreement and Schedules issued 17th July 2015 as accepted by the Consortium in its Final Bid.

PM	Pinsent Masons
Trust	Sandwell and West Birmingham Hospitals NHS Trust
Project Co	The Hospital Company

The Project Agreement and Schedules are agreed save as set out below and the completion of gaps, inclusion of drafting and final positions (such as those agreed in the technical meetings) agreed during dialogue and specific technical/financial information. Note the table includes drafting inserted by the Trust which is agreed but did not appear in the Final Bid Project Agreement. In such cases, discussion will be limited to drafting issues. Amendments updating legislation are not included in the table.

	Document	Status/Issue
1	Project Agreement and Schedule1 (Definitions)	Agreed subject to: Clause 39 (Change in Law) drafting to align with agreed CRC drafting. Clause 44.1.9 – termination thresholds for SFPs will be 14,500 in any 12 month rolling period and the threshold for the 6 month rolling period to be agreed.
2	Schedule 2 (Completion Documents) Part 1 (Documents to be delivered by Project Co)	Agreed subject to any finalisation.
3	Schedule 2 (Completion Documents) Part 2 (Documents to be delivered by the Trust)	Agreed subject to any finalisation
4	Schedule 3 (Custody Agreement)	Agreed subject to comment by Custodian.
5	Schedule 4 (Key Works Personnel)	To be agreed.
6	Schedule 5 (Disaster Plan)	Agreed subject to inclusion of appendices
7	Schedule 6 (Funders' Direct Agreement)	Agreed subject to changes arising from selected form of funding.
8	Schedule 7 (Land Matters) Part 1 (Retail Responsibility Matrix)	Agreed
9	Schedule 7 (Land Matters) Part 2 (Project Co Lease)	Agreed subject to any finalisation of drafting.
10	Schedule 8 Part 1 (Planning/Consents)	Schedule to be updated to reference Reserved Matters/ Full Planning Consent.
11	Schedule 8 Part 2 (Safety During Construction)	Agreed.
12	Schedule 8 Part 3 (Trust's Construction Requirements)	Agreed save for the consolidation of any agreed derogations.
13	Schedule 8 Part 4 (Project Co Proposals)	To be developed further in accordance with paragraph D2 of this letter based on the requirements set out in Schedule 8 part 4 of the Final Bid PA.
14	Schedule 8 Part 5 (Reviewable Design Data)	To be developed further.
15	Schedule 8 Part 6 (Room Data Sheets)	To be developed further.

	Document	Status/Issue
16	Schedule 8 Part 7 (Thermal and Energy Efficiency Testing Procedure)	Agreed.
17	Schedule 8 Part 8 (Quality Plans (Design and Construction))	To be developed further.
18	Schedule 9 (Programme)	Final programme to be finalised and inserted.
19	Schedule 10 (Review Procedure)	Agreed.
20	Schedule 11 (Collateral Agreements)	Agreed. Funder may require further collateral agreements in the same format.
21	Schedule 12 (Outline Commissioning Programme)	Agreed subject to inclusion of final programme dates.
22	Schedule 13 (Equipment)	Agreed subject to update of Equipment Responsibility Matrix at Part 1, equipment lists aligned to design development, final agreement of Terms of Reference for Equipment Committee, drafting in relation to "Selection Rights" vs "Selection Outputs" and inclusion of specifications for AGVs and Active ICT equipment.
23	Schedule 14 (Service Requirements)	Agreed subject to finalisation of the Performance Standards Table to ensure aligned with Schedule 18, satisfactory conclusion of the small number of "amber" items still to be agreed, amendments to finalise a small number of tidying up/inconsistencies in the drafting, resolution of the items recorded in appendices 3 & 7 of this document and finalisation of the Interface Protocol at Appendix 3. Also finalisation of Part 2 IM&T provisions to align with agreed amendments to Schedule 8 and the scope of services required by the Trust.
24	Schedule 15 (Independent Tester)	Agreed subject to check on scope of services. IT contract to be tendered.
25	Schedule 16 (Not Used)	Agreed.
26	Schedule 17 (Not Used)	
27	Schedule 18 (Payment Mechanism)	<p>Agreed, save for those points set out at the table entitled " SCHEDULE 18 – Issues table circulated by Carillion and to include Trust Response of 3 July 2015" and attached at Appendix 7;</p> <p>Indexable Element – amendment required to reflect that there is no split between labour and non- labour elements;</p> <p>It has been agreed that the total number of SFPs for clause 44.1.9 for a 12 month rolling period will be 14,500.</p> <p>[Note : We are happy to include some wording around the part of Appendix D which is not agreed – part year termination thresholds for example – but not the all-encompassing statement that makes it appear 14,500 is not agreed]</p> <p>The 6 month number is still to be agreed.</p>

	Document	Status/Issue
28	Schedule 19 (Financial Model)	To be included.
29	Schedule 20 (Deed of Safeguard)	Agreed.
30	Schedule 21 (Insurance)	Agreed.
31	Schedule 22 (Variation Procedure)	Agreed.
32	Schedule 23 (Compensation on Termination)	Agreed, subject to finalising the position in respect of Part F (Compensation for termination of Elective Services) and any amendments arising from the funding competitions.
33	Schedule 24 (Handback Procedure)	Agreed.
34	Schedule 25 (Record Provisions)	Agreed.
35	Schedule 26 (Dispute Resolution)	Agreed.
36	Schedule 27 (Project Co Information)	To be completed.
37	Schedule 28 (Certificates)	Agreed.
38	Schedule 29 (Refinancing)	Drafting amendments required to reflect HM Treasury position on refinancing. Principles agreed by Carillion.
39	Schedule 30 (Employee Information)	Agreed subject to update of employee information.
40	Schedule 31 (Proposed Workforce Information)	To be completed
41	Schedule 32 (Pensions)	Agreed.
42	Schedule 33 (Not Used)	
43	Schedule 34 (Insurance Proceeds Account Agreement)	Agreed.
44	Schedule 35 (Commercially Sensitive Information)	Agreed.
45	Schedule 36 (Independent Tester Certificate)	Agreed
46	Schedule 37 (Responsibility Matrix)	Agreed

APPENDIX 4

IMPACT OF DELAYS ON PLANNED FINANCIAL CLOSE

The appointment of the Consortium as preferred bidder is dependent, among other things, on written confirmation that all prices must remain fixed up to six months beyond the Planned Financial Close Date. In the event that actual financial close occurs beyond six months after the Planned Financial Close Date and this has not been caused or materially contributed to by the Consortium, then the construction cost shall be adjusted as follows:

- Construction: BIS PUBSEC Tender Price Index of Public Sector Non-Housing (PUBSEC) index - The capital cost included in the Financial Model will be adjusted by application of the movement in the published BIS index over the period between the Fixed Bid Price Expiry Date and the actual date of financial close but only insofar as the delay to financial close has a material impact on the anticipated timing of incurrence of the capital costs.
- Each advisor to take all reasonable steps to mitigate any additional costs.
- All other costs (excluding finance costs, SPV Financial and legal advisor costs and shadow funder due diligence adviser costs): RPI - All other costs included in the Financial Model (excluding finance costs) will be adjusted by application of the movement in the published retail price index (excluding mortgage interest payments) (RPI) over the period between the Fixed Bid Price Expiry Date and the actual date of financial close but only insofar as the delay to financial close has a material impact on the anticipated timing of incurrence of the other costs (excluding finance costs).

APPENDIX 5
LETTERS OF ACKNOWLEDGEMENT

The Hospital Company
3rd Floor
25 Maddox Street
London
W1S 2QN

[] 2013

Mr T Lewis
Chief Executive
Sandwell and West Birmingham Hospitals NHS Trust
Trust Headquarters
1st floor - Health & Wellbeing Centre
Sandwell General Hospital
Lyndon
West Bromwich
B71 4HJ

Dear Sir,

All terms used in this letter shall have the meaning given to them in the letter sent by the Trust to The Hospital Company entitled "Sandwell and West Birmingham Hospitals NHS Trust - PREFERRED BIDDER LETTER"

1. We acknowledge that The Hospital Company, comprising Carillion Private Finance Ltd, together with Carillion Construction Ltd, Carillion (AMBS) Ltd (the "**Consortium**") has:

signed and dated the letter dated  (the "**Preferred Bidder Letter**"); and

confirmed to us that by signing the Preferred Bidder Letter, they have acknowledged to the Trust that the Preferred Bidder Letter contains all outstanding issues and our client has advised us that none of the issues noted as outstanding in the Preferred Bidder Letter are commercial or price sensitive.

2. We confirm that the Draft Project Agreement and Schedules issued 17th July 2015 as accepted by the Consortium in its Final Bid (save for the outstanding issues outlined in the Preferred Bidder Letter) are acceptable to our client and therefore to us.
3. We confirm that, except in relation to the: (i) resolution of drafting for the commercial issues set out in the Preferred Bidder Letter, (ii) resolution of any drafting in square brackets and (iii) completion of any outstanding information, as far as we are aware, the Consortium does not have any further comments, qualifications or reservations in relation to the draft Project Agreement.
4. We confirm that we will keep the fact of the Consortium's designation as preferred bidder confidential until there is a public announcement by the Trust, which is to occur after the Preferred Bidder Letter has been signed or countersigned by all parties to it. The terms of any press announcement by us relating to the Consortium's designation as preferred bidder must have the prior approval of the Trust.

5. We confirm that we will, to the extent within our control, adhere to the programme as detailed in Appendix 2 to the Preferred Bidder Letter (Key Activities to Financial Close) setting out the timescale for finalising all matters relating to the funding from the Consortium's selection as preferred bidder through to financial close.

Yours faithfully,

APPENDIX 6 CERTIFICATE OF GOOD STANDING

STATEMENT RELATING TO GOOD STANDING – GROUNDS FOR OBLIGATORY EXCLUSION (INELIGIBILITY) AND CRITERIA FOR DISCRETIONARY REJECTION OF CONSORTIUM In accordance with Regulation 23 of the Public Contracts Regulations 2006 and Regulation 57 of the Public Contracts Regulations 2015

Sandwell and West Birmingham Hospitals NHS Trust

We The Hospital Company, comprising Carillion Private Finance Ltd, together with Carillion Construction Ltd, Carillion (AMBS) Ltd (the "**Consortium**") confirm that, to the best of our knowledge, neither the Consortium nor any Relevant Organisation (as defined in paragraph 3) is in breach of the provisions of Regulation 23 of the Public Contracts Regulations 2006 and Regulation 57 of the Public Contracts Regulations 2015 and in particular that:

1 **Grounds for obligatory exclusion (ineligibility)**

Neither the Consortium nor any Relevant Organisation nor its or their directors nor any other person who has powers of representation, decision or control over any of them has been convicted of any of the following offences or their equivalent:

- (a) conspiracy within the meaning of section 1 of the Criminal Law Act 1977 or article 9 or 9A of the Criminal Attempts and Conspiracy (Northern Ireland) Order 1983 where that conspiracy relates to participation in a criminal organisation as defined in Article 2(1) of Council Joint Action 98/733/JHA;
- (b) corruption within the meaning of section 1 of the Public Bodies Corrupt Practices Act 1889 or section 1 of the Prevention of Corruption Act 1906;
- (c) the offence of bribery;
- (d) bribery within the meaning of sections 1, 2 or 6 of the Bribery Act 2010, or section 113 of the Representation of the People Act 1983;
- (d) fraud, where the offence relates to fraud affecting the financial interests of the European Communities as defined by Article 1 of the Convention relating to the protection of the financial interests of the European Union, within the meaning of:
 - (i) the offence of cheating HM Revenue and Customs;
 - (ii) the offence of conspiracy to defraud;
 - (iii) fraud or theft within the meaning of the Theft Act 1968, the Theft Act (Northern Ireland) 1969, and the Theft Act 1978 or the Theft (Northern Ireland) Order 1978;
 - (iv) fraudulent trading within the meaning of section 458 of the Companies Act 1985, article 451 of the Companies (Northern Ireland) Order 1986 or section 993 of the Companies Act 2006;

- (v) defrauding the Customs within the meaning of the Customs and Excise Management Act 1979 and the Value Added Tax Act 1994;
- (vi) an offence in connection with taxation in the European Community within the meaning of section 71 of the Criminal Justice Act 1993; or
- (vii) destroying defacing or concealing of documents or procuring the extension of a valuable security within the meaning of section 20 of the Theft Act 1968 or section 19 of the Theft Act (Northern Ireland) 1969;
- (viii) fraud within the meaning of section 2, 3 or 4 of the Fraud Act 2006;
- (ix) the possession of articles for use in frauds within the meaning of section 6 of the Fraud Act 2006, or the making, adapting, supplying or offering to supply articles for use in frauds within the meaning of section 7 of that Act;
- (e) any offence listed –
 - (i) in section 41 of the Counter Terrorism Act 2008;
 - (ii) in Schedule 2 to that Act where the Court had determined that there is a terrorist connection;
- (f) any offence under sections 44 to 46 of the Serious Crime Act 2007 which relates to an offence covered by subparagraph (e)
- (g) money laundering within the meaning of the section 340(11) and 415 of the Proceeds of Crime Act 2002;
- (h) an offence in connection with the proceeds of criminal conduct within the meaning of section 93A, 93B or 93C of the Criminal Justice Act 1988 or article 45, 46 or 47 of the Proceeds of Crime (Northern Ireland) Order 1996;
- (i) an offence under section 4 of the Asylum and Immigration (Treatment of Claimants, etc.) Act 2004;
- (j) an offence under section 59A of the Sexual Offences Act 2003;
- (k) an offence under section 71 of the Coroners and Justice Act 2009;
- (l) an offence in connection with the proceeds of drug trafficking within the meaning of section 49, 50 or 51 of the Drug Trafficking Act 1994; or
- (m) any other offence within the meaning of Article 45(1) of the Public Sector Directive (2004/18/EC) or Article 57(1) of the Public Procurement Directive (2014/24/EU).

2 **Discretionary Grounds for Rejection**

The Consortium confirms that;

The Consortium and each Relevant Organisation:

- (a) being an individual is not bankrupt or has not had a receiving order or administration order or bankruptcy restrictions order made against him or has not made any composition or arrangement with or for the benefit of his creditors or does not appear 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, article 242 of the Insolvency (Northern Ireland) Order 1989, or in Scotland has not granted a trust deed for creditors or become otherwise apparently insolvent, or is not the subject of a petition presented for sequestration of his estate, or is not the subject of any similar procedure under the law of any other state;
- (b) being a partnership constituted under Scots law has not granted a trust deed or become otherwise apparently insolvent, or is not the subject of a petition presented for sequestration of its estate;
- (c) being a company or any other entity within the meaning of section 255 of the Enterprise Act 2002 has not passed a resolution or is not the subject of an order by the court for the company's winding up otherwise than for the purpose of bona fide reconstruction or amalgamation, or has not had a receiver, manager or administrator on behalf of a creditor appointed in respect of the company's business or any part thereof or is not the subject of the above procedures or is not the subject of similar procedures under the law of any other state;
- (d) has not been convicted of a criminal offence relating to the conduct of his business or profession;
- (e) has not committed an act of grave misconduct in the course of his business or profession;
- (f) has fulfilled obligations relating to the payment of social security contributions under the law of any part of the United Kingdom or of the relevant State in which the Consortium or the Relevant Organisation is established;
- (g) has fulfilled obligations relating to the payment of taxes under the law of any part of the United Kingdom or of the relevant State in which the Consortium or the Relevant Organisation is established;
- (h) is not guilty of serious misrepresentation in providing any information required of it under this regulation;
- (i) in relation to procedures for the award of a public services contract, is not licensed in the relevant State in which he is established or is not a member of an organisation in that relevant State when the law of that relevant State prohibits the provision of the services to be provided under the contract by a person who is not so licensed or who is not such a member.
- (j) where applicable, is registered with the appropriate trade or professional register(s) in the EU member state where it is established (as set out in schedule 6 of the Public Contracts Regulations 2006) under the conditions laid down by that member state*.

3 **"Relevant Organisation"** means any member of the Consortium.

Signed:

Name:

Position:

Date:

* In the UK this condition is satisfied by registration with Companies House or a declaration on oath that the Candidate is carrying on business in the trade in question in the UK at a specific place of business and under a specific trading name.

APPENDIX 7

SCHEDULE 18 – Issues table circulated by Carillion and to include Trust Response of 3 July 2015

Paragraph	Principle	Comment	Trust Response
5.4.3 (a) to (d)	Remedial Periods are the “counting blocks” to calculate service performance deductions.	The current drafting refers to Sessions as the counting blocks for service performance failures	<p>There are some Schedule 14 failures which have Remedial Periods and some which have Rectification Periods. The Schedule 14 Performance Standards Table distinguishes between the two by referring to Schedule 18 Rectification where this applies rather than a Remedial Period.</p> <p>If there's Rectification then no SFPs / Deductions kick in unless the performance failure is not rectified within the allotted time.</p> <p>For other failures which don't have a Rectification Period but have a Remedial Period as per Schedule 14, then it's an automatic fail and the pounds and points kick in on the fail and then the Remedial Period sets the ongoing cycle of failures if it is not remedied.</p>
5.4.3 (c) and (d)	The Remedial Period in which a Service Performance Failure is Permanently Rectified is not counted for deductions and points.	Current drafting includes the counting block in which the Service Performance Failure is Permanently Rectified	Agreed this principle.
5.4.3 (c)	Make Safe is not subject to a Rectification Period.	A Make Safe requirement has been added to the provisions	Drafting needs correcting here – work through together to capture any failure to Make Safe correctly.
Use of Functional Area	Functional Unit comprises of a number of rooms and spaces (ie “Area”, the smallest	The change of Area to Functional Area changes which parts of the Facilities are	There are Functional Areas, Functional Units and within each Functional Unit there is a group

Paragraph	Principle	Comment	Trust Response
	component in the FAFU) and Functional Area comprises of two or more Functional Units	deemed Unavailable or Unavailable. This changes what we believe is our joint understanding	of rooms or areas called an "Area". Need "Area" as well as Functional Area because there is a Room Data Sheet for each relevant space within the hospital - ie each "Area" - not for each Functional Area / Functional Units because that would not be work. The Area links it to the Room Data Sheet. Drafting to be reviewed to re-introduce "Area" in appropriate places and use Functional Area in appropriate places.
Energy CRC	ProjCo has the opportunity to reset the energy baseline on an annual basis as a result of Trust significant service changes	Trust should not have the right of veto. If we can't agree then it should go to an independent review and the costs of the independent review are paid for by the "losing" party Drafting needs updating to reflect principles paper including CRC	Wording for further discussion but no issue of principle.
11 and 13	Ability for Project Co to request an extension to Permanent Rectification Periods set out in the table in paragraph 11 in extreme circumstances such as a key supplier ceasing to trade The same principle is applied to the table in paragraph 13	We understand that this at the Trust's discretion. How do we recognise a degree of reasonableness? Not included in the table in paragraph 13	This is to remain at Trust's absolute discretion – as per Daphne's email of Friday 3 July and as per our discussions. To be added to table in paragraph 13. Also check whether to add potential to extend backstops on all the other rows as well.
11 and 13	List of extended Permanent Rectification Periods for agreed items	Fire doors and switched locks remain to be agreed	Yes – to be further discussed.
8A.5A	A list of performance standards where SFPs apply from discovery	Item number 21 remains to be agreed	Yes – to be further discussed.
3.3.2	The Trust provides details of the circumstances where the monthly report reporting	Clarity that this is the only basis against which satisfaction is measured and all errors and	This needs further discussion.

Paragraph	Principle	Comment	Trust Response
	requirements are not met after which ProjCo have 5 Business Days to correct	omissions will be captured in the Trust's notification	
8.1	Only material or deliberate omissions trigger reporting deductions	Re-insert drafting agreed on 2 nd December as this point is different to whole hospital unavailability for non-reporting	This needs further discussion – not agreed.

Appendix 8
Final Bid Issues List

TO FOLLOW

Appendix 9
IUK Amendments

Sandwell Hospital PF2 Project

Table of SoPC derogation points identified by IUK

IUK comment	Trust Response
50.14 – If there are other Shareholders this clause needs to be repeated for each. SoPC 6.4.1	To be consistent with Article 12 of the IUK Holdco Articles and Clause 9 of the IUK Shareholders Agreement, once EFC concluded.
50.13 – As HMTCo is a Shareholder the Contractor would be expected to want to disregard transfers within HMTCo Group. SoPC 6.4.1(b)(iv)	To be consistent with Article 12 of the IUK Holdco Articles and Clause 9 of the IUK Shareholders Agreement, once EFC concluded.
SoPC clause 12.1.1 (a) Perhaps Schedule 2 (Completion Documents) which we have not been sent has this provision for delivering copies to Trust of all Project Documents.	<p>Yes – Schedule 2 Completion Documents deals with the delivery of all Project Documents to the Trust</p> <div> </div> <p>Sandwell - The Midland Metropolitan</p>
7.2.6 – Title matters has been deleted. This is SoPC 13.4.5. Is there a reason for this?	PF2 introduced some changes to the title clause. The Trust gives a Title Warranty at 7.2.4. Was there any specific concerns?
7.3 – Tax Compliance. The drafting used is not the most recent amendments that have been incorporated in SoPC 13.7 and required by the Cabinet Office. The PA drafting was based on the 2013 Action Note. The 2014 Action Note was incorporated in SoPC later. Please make the necessary changes. At the end of this note we provide a copy of the amended SoPC drafting. Unfortunately it has not been possible to show the changes in black lining.	We will discuss with Carillion and include this revised drafting at the next stage of the process when the documentation is being finalised.
Schedule 21 Part 4 paragraph 2.3 – Insurance Premium Risk Sharing. The address to deliver the Joint Insurance Cost Report to is stated in the PA to be the HMT PFU when it should be infrastructureUK@hmtreasury.gsi.gov.uk See SoPC section 17.8.15, Schedule [A] paragraph 2.3. NB – please note the “UK” before the @.	Ok. Thank you – we will make this amendment.
35.11 to 35.13 – Capital payments. This has been the subject of email exchanges between Pinsents and IUK and IUK await the relevant drafting.	<p>Agreed. The drafting itself in Clauses 35.11 - 35.13 does not need amendment but IUK need to see the relevant schedule of the Construction Contract which we will provide once it is available.</p> <p>Note that Ashurst have raised Senior Lender issues on the Capital Contribution regime to be considered in the Senior Funding Competition.</p>
53 – Tax. This deals with some of SoPC 22.4 (VAT) but does not include 22.4(c) and (d).	Ok, thank you. We will take a look at this, discuss with Carillion and make any amendments necessary.
44.3 – Rectification. This is permitted in the PA where the Project Co abandons the project. Rectification on abandonment is not permitted under SoPC 23.2.4.	In relation to running a hospital and the need for continuity where safely possible, the concept of rectification makes sense and has always been included within the health standard form.

44C – Termination for breach of Tax Compliance Warranty. SoPC 23.7.1 starts saying that it takes effect if there has been a termination under the tax compliance clause but this PA does not, so making the clause unworkable because it says if terminated under this clause but this clause does not give a right to terminate.	Clause 7.3.4 and 7.3.5 cross refer to the right to terminate under Clause 44C so I think it works ok. We could add the words "to terminate" after "give a notice" where mentioned in 7.3.4 and 7.3.5 to make it completely clear.
Schedule 23 Part B paragraph 3.1.4 and 3.1.15 – Retendering procedure. The required SoPC 23.2.8 (n) and (o) references to deduction of the Life Cycle Surplus have not been and need to be included.	See paragraphs 3.1.16 and 3.1.18 in Part B of Schedule 23
Schedule 23 Part B paragraph 4.3.1 – No Retendering Procedure. The equivalent clause in SoPC is 23.2.9(c) (i) which has not been used in its latest form. It deals with calculating forecast amounts.	See paragraph 4.7 of Part B of Schedule 23.
Schedule 23, Part D – Consequences of Termination for Corrupt Gifts and Fraud. This should and does not provide for payment by Project Co to Trust of the Lifecycle Surplus. See SoPC23.4.4	See Clause 54.5A of the Project Agreement. This regime is meant to ensure the Senior Lenders are paid but not Equity. However, when calculating the Revised Senior Debt Termination Amount, all cash balances are deducted, so I do not see how ProjectCo can in practice pay that amount.
44C – Termination for Breach of Tax warranty. This should but does not provide for payment by Project Co to Trust of Lifecycle Surplus. See SoPC 23.4.4 and 23.7.2.	Thank you, we will discuss with Carillion and add in to the next draft – either in Schedule 23 or in the Breach on Tax Warranty termination clause in the Project Agreement. This regime is meant to ensure the Senior Lenders are paid but not Equity. However, when calculating the Revised Senior Debt Termination Amount, all cash balances are deducted, so I do not see how ProjectCo can in practice pay that amount.
48.12 – Set-off on Termination. Why are Persistent Breach and Breach of Tax Warranty in there? See SoPC 24.4.	We will revisit this. Breach of Tax Warranty pays out Senior Debt and so should be protected from set off.
Schedule 23, Part E (General) paragraph 1 is misleadingly headed "Payment of Interest" when most of it is about payment by instalments. See SoPC 24.5.	We can change the heading of Part E.
48.13 – Full and Final Settlement. This omits listing termination for Breach of Refinancing and Breach of Tax Warranty. See SoPC 24.7.2. Please note that there has been a change in administrative email addresses at HMT so that the email address to send the IRR to is now PF2equity@hmtreasury.gsi.gov.uk . This is at SoPC31.2(h)	Thank you. We will add those in and also change the email address.
66 – No Privity. This deals with the Contracts (Rights of Third Parties) Act. It needs to reflect SoPC 31.2.4 and does save that it leaves out the last sentence which reads: "This clause does not affect any right or remedy of any person that exists or is available otherwise than pursuant to that Act." Also, the clause reserves the right of HMT to get the IRR but not to get the Joint Insurance Cost Report. SoPC 31.2.4 is also missing this reference to the Joint Insurance Cost Report which is referred to at 31.2(j)(iii). Please amend accordingly.	Thank you. We will make these amendments in the next draft of the Project Agreement. Are not HMT's rights under the Shareholders Agreement sufficient?
One other small point noticed is that in clause 28.20 the ref should be to 28.19 and not 28.20.	Thank you we will amend.

<p>Extract from latest draft of SoPC PF2</p> <p>13.7 BREACH OF TAX COMPLIANCE WARRANTY</p> <p>13.7 <i>The Authority is required to take steps regarding shareholders' compliance with the requirements of The Cabinet Office Procurement Policy Note: Measures to Promote Tax Compliance (Action Note 03/14) ("Action Note 03/2014") regarding tax avoidance. This requires each Authority to include certain questions regarding tax compliance when procuring supply arrangements having a value of £5m or more. This is mandatory for central government bodies (including their executive agencies and non-departmental public bodies) and good practice for other contracting authorities. Where a supplier is a joint venture, the supplier is also required to provide information on the members of the joint venture. Action Note 03/2014 states that contracts must include an obligation on the supplier to disclose an occasion of tax non-compliance and it recommends the inclusion of a warranty in respect of the information provided during procurement. The Authority must have the right to terminate the supply arrangements if there is a breach of this warranty or a subsequent "Occasion of Tax Non-Compliance" (where the supplier fails to provide details of proposed mitigating measures which the supplier (or the relevant shareholder) would take which are acceptable, in the reasonable opinion of the Authority). The termination provisions are addressed in Section 23.7 (Termination for Breach of Tax Compliance Warranty).</i></p> <p><i>Required drafting is as follows:</i></p> <p>13 Tax Compliance</p> <p>13.7.1 <i>The Contractor represents and warrants to the Authority that at the date of this Contract, it has notified the Authority in writing of any Occasions of Tax Non-Compliance and any litigation in connection with any Occasions of Tax Non-Compliance that it or, so far as it is aware having made reasonable enquiries, any of the Shareholders (other than HMTCo) is involved in.</i></p> <p>13.7.2 <i>If at any time an Occasion of Tax Non-Compliance occurs in relation to it or any Shareholder other than HMTCo (a "Non-Compliant Shareholder"), the Contractor shall:</i></p> <p><i>notify the Authority in writing of such fact within five (5) Business Days of it becoming aware of that occurrence; and</i></p> <p><i>provide to the Authority:</i></p> <p><i>promptly, and in any event within twenty (20) Business Days of its becoming aware of that occurrence, details of the steps which it, or as the case may be, the Non-Compliant Shareholder is taking to address the Occasion of Tax Non-Compliance and to prevent the same from recurring, together with any mitigating factors that it considers relevant (together "Proposed Mitigating Measures"); and</i></p>	<p>We will discuss this drafting with Carillion and incorporate in the next draft of the Project Agreement.</p> <p>We are comfortable with the proposed clauses.</p> <p>As project co will be a new company then this is fine</p> <p>Of course we will but do not envisage this occurring in the future.</p> <p>OK</p>
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such other information in relation to the Occasion of Tax Non-Compliance as the Authority may reasonably require within five (5) Business Days of receipt of notice from the Authority to do so.

13.7.3 The Authority will notify the Contractor in writing if the Proposed Mitigating Measures are acceptable to it, in its reasonable opinion, within fifteen (15) Business Days of receipt of all information required to be provided in accordance with Clause 13.7.2.

13.7.4 Where the Authority notifies the Contractor that the Proposed Mitigating Measures are not acceptable, the Authority may, in that notice, request that the Contractor provides details of further measures it, or as the case may be, the Non-Compliant Shareholder, would take to prevent the same from recurring, together with any further mitigating factors that it considers relevant. Within twenty (20) Business Days of receipt of a notice from the Authority requesting further measures, the Contractor will either provide details of the further measures it, or as the case may be, the Non-Compliant Shareholder, is willing to take or notify the Authority that it is not willing to take further measures. The Authority will consider any further measures proposed by the Contractor and notify the Contractor within fifteen (15) Business Days if those further measures, taken together with the Proposed Mitigating Measures, are acceptable to the Authority, acting reasonably.

13.7.5 If:

- (a) the warranty by the Contractor contained in Clause 13.7.1 is untrue and Mitigating Measures are not agreed in accordance with Clauses 13.7.2 to 13.7.4 (inclusive); and/or
- (b) the Contractor commits a material breach of its obligation to notify the Authority of any Occasion of Tax Non-Compliance and/or the Contractor fails to provide details of Proposed Mitigating Measures each as required by Clause 13.7.2; and/or
- (c) the Authority otherwise becomes aware that an Occasion of Tax Non-Compliance has occurred in relation to the Contractor or a Shareholder (other than HMTCO) and the Contractor fails to provide details of Proposed Mitigating Measures within twenty (20) Business Days of its being required by the Authority to do so; and/or
- (d) the Authority notifies the Contractor under Clause 13.7.4 that the Proposed Mitigating Measures are not acceptable and, if the Contractor is requested to provide details of further measures pursuant to Clause 13.7.4, the further measures (if any) are not acceptable to the Authority, in its reasonable opinion and the Authority notifies the Contractor to that effect; and/or
- (e) in any such case the Contractor fails to implement, or

procure the implementation by a Non-Compliant Shareholder of, any Mitigating Measures in any material respect (including as to timetable)

then the Authority shall be entitled to give to the Contractor:

- (i) where the Occasion of Tax Non-Compliance has occurred in relation to the Contractor, a notice under Clause 23.7.1 (Termination by the Authority for Breach of the Tax Compliance Provisions); and
- (ii) where the Occasion of Tax Non-Compliance has occurred in relation to a Shareholder, a notice under Clause 13.7.6.

13.7.6 Where the Occasion of Tax Non-Compliance applies to a Non-Compliant Shareholder, the Authority may by written notice (a **"Shareholder Tax Non-compliance Notice"**) require that the Non-Compliant Shareholder transfers all its shares and Shareholder Debt to a person who is not an Unsuitable Third Party within one hundred and eighty (180) days commencing on the date the Shareholder Tax Non-compliance Notice is served. If the Non Compliant Shareholder does not effect such transfer of shares and Shareholder Debt to a person who is not an Unsuitable Third Party within such one hundred and eighty (180) day period (or such longer period as may be agreed by the Authority in its absolute discretion) then the Authority will be entitled to give a notice to the Contractor under Clause 23.7.1 (Termination by the Authority for breach of the Tax Compliance Provisions).

13.7.7 If the Contractor fails to implement, or procure the implementation by a Non-Compliant Shareholder of, any Mitigating Measures agreed to by the Authority in any material respect (including as to timetable) following an Occasion of Tax Non-Compliance which applies to a Non-Compliant Shareholder, the Authority may by written notice (a **"Shareholder Tax Mitigation Measures Non-Compliance Notice"**) require that the Non-Compliant Shareholder transfers all its shares and Shareholder Debt to a person who is not an Unsuitable Third Party within ninety (90) days commencing on the date the Shareholder Tax Mitigation Measures Non-Compliance Notice is served. If the Non-Compliant Shareholder does not effect such transfer of shares and Shareholder Debt to a person who is not an Unsuitable Third Party within such ninety (90) day period (or such longer period as may be agreed by the Authority in its absolute discretion) then the Authority will be entitled to give a notice to the Contractor under Clause 23.7.1 (Termination by the Authority for breach of the Tax Compliance Provisions).

Definitions

"DOTAS"

means the Disclosure of Tax Avoidance Schemes rules which require a promoter of tax schemes to tell HM Revenue & Customs of any specified notifiable arrangements or proposals and to provide prescribed information on those arrangements or proposals within set time limits as contained in Part 7 of the

Finance Act 2004 and in secondary legislation made under vires contained in Part 7 of the Finance Act 2004 and as extended to National Insurance Contributions by the National Insurance Contributions (Application of Part 7 of the Finance Act 2004) Regulations 2012, SI 2012/1868 made under s.132A Social Security Administration Act 1992;

“General Anti-Abuse Rule” or “GAAR”

means:

- (a) the legislation in Part 5 of the Finance Act 2013; and*
- (b) any [future] Legislation to counteract tax advantages arising from abusive arrangements to avoid national insurance contributions;*

“Halifax Abuse Principle”

means the principle explained in the CJEU Case C-255/02 Halifax and others;

“Mitigating Measures”

means Proposed Mitigating Measures, together with any further measures proposed in accordance with Clause 13.7.4, which are acceptable to the Authority in its reasonable opinion;

“Occasion of Tax Non-Compliance”

means:

- (a) any tax return of the Contractor or a Shareholder submitted to a Relevant Tax Authority on or after 1 October 2012 is found to be incorrect as a result of:*
 - (i) a Relevant Tax Authority successfully challenging the Contractor or the relevant Shareholder under the General Anti-Abuse Rule or the Halifax Abuse Principle or under any tax rules or legislation that have an effect equivalent or similar to the General Anti-Abuse Rule or the Halifax Abuse Principle;*
 - (ii) the failure of an avoidance scheme which the Contractor or the relevant Shareholder was involved in, and which was, or should have been, notified to a Relevant Tax Authority under the DOTAS or any equivalent or similar regime; and/or*
- (b) the Contractor’s or the relevant Shareholder’s tax affairs giving rise on or after 1 April 2013 to a criminal conviction in any jurisdiction for tax-related offences which is not spent at the date of this Agreement or to a penalty for civil fraud or evasion;*

“Proposed Mitigating Measures” *shall have the meaning specified in Clause 13.7.2(b)(i) (Tax Compliance);*

“Relevant Tax Authority”

means HM Revenue & Customs, or, if applicable, a tax authority in the jurisdiction in which the Contractor or, as the case may be, the relevant person is established;

“Shareholder Debt”

means monies advanced or otherwise made available to the Contractor [or Holdco] by way of debt or loan stock subscription by a Shareholder or an Affiliate of a Shareholder [(or, in relation to the Contractor, by Holdco)];

“Unsuitable Third Party”

means:

- (a) any person who has a material interest in the production, distribution or sale of [here specify as relevant e.g. tobacco products, alcoholic drinks and/or pornography];*
- (b) any person whose activities are, in the reasonable opinion of the Authority, incompatible with the provision of [here specify relevant public service e.g. educational services];*
- (c) any person whose activities, in the reasonable opinion of the Authority, pose or could pose a threat to national security; or*
- (d) any person whose tax returns submitted on or after 1 October 2012 have been found to be incorrect as a result of:*
 - (i) HMRC successfully challenging it under the General Anti-Abuse Rule (“GAAR”) or the Halifax Abuse Principle;*
 - (ii) the Relevant Tax Authority challenging it under any tax rules or legislation that have an effect equivalent or similar to the GAAR or the Halifax Abuse Principle; and/or*
 - (iii) the failure of an avoidance scheme which the person was involved in and which was, or should have been, notified under the Disclosure of Tax Avoidance Scheme or any equivalent or similar regime in a jurisdiction in which the person is established.*

APPENDIX 12a – INPATIENT BED CONFIGURATION BY CONDITION GROUP

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case

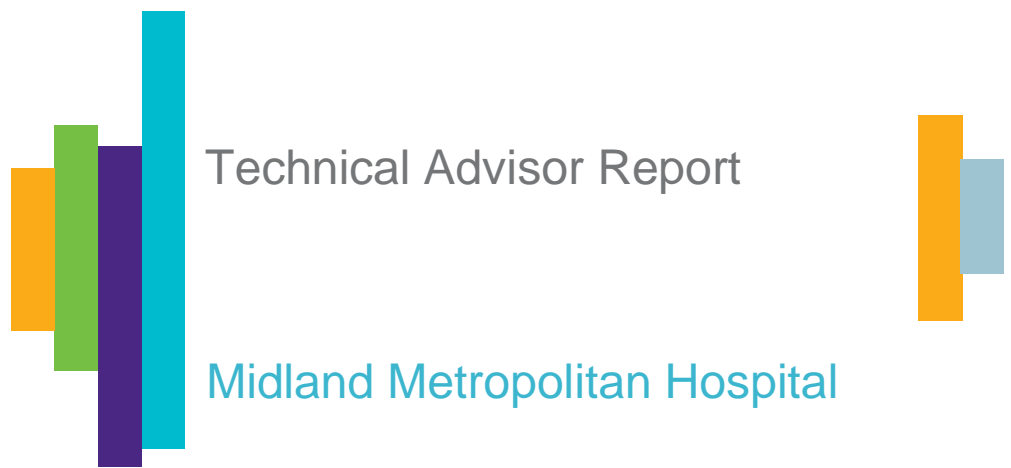
Midland Met Inpatient Beds by Condition Group

Condition Groupings	Specialties	Bed Numbers	Location in Midland Met
Medicine	Respiratory: Includes 4 level 1 beds & 10 isolation rooms	32	Level 3
Medicine	Acute Elderly: Includes acute elderly & mental illness	32	Level 7
Medicine	GI: Includes medical, acute GI bleeding, 4 level 1 beds	32	Level 8
Medicine	Haematology oncology, Haemoglobinopathy Dermatology & Rheumatology	32	Level 6
Medicine	Stroke & neurology Includes 4 level 1 beds	32	Level 6
Medicine	Short stay, frail elderly, poisons (monitored beds)	32	Level 2
Musculoskeletal	Orthopaedics & Trauma	64	Level 7 (2 wards)
Maternity	Ante- and post-natal, HDU (level 2). In addition there is a Foetal Medicine & Antenatal Day Assessment Unit (6 spaces) & Transfer Lounge (6 spaces – can be flexed to beds at peak demand)	60	Level 4 (2 wards)
Gynaecology & Gynaecology	In addition a collocated EGAU (6 spaces) & EPAU (6 spaces)	24	Level 6
Surgical Specialties	Long stay, Colorectal Surgery includes 4 level 1 beds	32	Level 8
Surgical Specialties	Short stay, Urology, ENT, Interventional Radiology, Plastic Surgery, Breast Surgery & Ophthalmology	32	Level 8
Cardiology	Includes 14 CCU beds & cardiology step down beds	32	Level 2
Sub Total		436	
Adult Acute Assessment	All adult emergency inpatients (except maternity, fracture of femur, stroke, & acute chest pain): <ul style="list-style-type: none"> • 56 medical assessment beds • 14 medical monitored beds • 24 trollies medical ambulatory assessment (in addition to a chaired wait) • 23 Surgical Assessment Unit trollies/beds 	117	Level 2 <ul style="list-style-type: none"> • AMU divided into: ambulatory zone, monitored bed zone, bedded zone • SAU
Critical Care (ICCU) level 2 & 3	All adult	30	Level 3

Condition Groupings	Specialties	Bed Numbers	Location in Midland Met
Neonatal	Intensive Care, High Dependency and Special Care	36	Level 3
Children	Includes Paediatric Assessment Unit, Adolescents, High Dependency. In addition there are 6 day case spaces.	50	Level 4 <ul style="list-style-type: none"> • PAU • Day Case zone • x 2 wards (including adolescent zone)
Sub Total		233	
Total		669	

APPENDIX 12b – TECHNICAL ADVISOR REPORT

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case



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1 Purpose of this report

The Department of Health (DH) has authorised Sandwell and West Birmingham Hospitals NHS Trust to continue with a single bidder for the procurement of the new Midland Metropolitan Hospital. This authorisation from DH is contingent upon Trust compliance with the following criteria:

'The Trust will be expected to provide, within one month of the date of this approval letter a report from its technical advisors either confirming that the building envelope set out in the single bidder's design is adequate to meet the brief set out in the Trust Construction Requirements (in particular with regard to the space allowed for service areas and circulation) or, if not, identifying any problems and the steps that the bidder and the Trust have agreed will be taken to remedy those problems without cost to the Trust.'

This report provides a response from the Trust's Technical Advisory team to the above DH requirement.

2 Roles of Technical Advisory team members

Input to this technical report has come from four members of our technical advisory team. The input they have provided is briefly detailed below and relates simply to this report, not to the full set of services that they have provided as part of our technical advisory team throughout the duration of this project.

2.1 Capita

Capita, as lead technical advisor and health planner has compiled this report on behalf of the technical advisory team. Capita has provided commentary on clinical functionality and compliance of the proposals to the Trust's clinical requirements based on their evaluation of the bidder design undertaken alongside the Trust's clinical stakeholders and evaluation team.

2.2 Sweett Group

Sweet Group has provided commentary on how the Gross Internal Floor Area has been presented and on the appropriateness of space allocated to communication and plant space in comparison with benchmarks that were identified for the purpose of monitoring the design development during a single bidder dialogue process. Comments have also been provided on the lifecycle assumptions.

2.3 IBI

IBI has provided commentary on the appropriateness of department, circulation and communication spaces and routes and provided a summary of their architectural review of Carillion's proposals, including functionality, design and approach to materials selection.

2.4 Hulley and Kirkwood

Hulley and Kirkwood has provided commentary on the appropriateness of plant and engineering services proposals and particularly the sizes of spaces allocated to accommodate these services, and how Carillion have responded to the Trust's construction requirements.

3 Evaluation Process

The Trust has followed the bid evaluation process outlined within the Invitation to Participate in Dialogue (ITPD) version 4 documentation issued by the Trust.

The Technical Advisory team has provided advice and support to the Trust during the design development process, and evaluation of both the Interim bid & design submitted in December 2014, and the draft final bid & design submitted by Carillion in April 2015

Input into the specific work-streams and design development boot-camps have been provided by Technical Advisory team members as follows:

- Clinical workstream – input provided by Capita health care planner and IBI architects
- Estates and Technical workstream – input provided by IBI, Hulley & Kirkwood, Capita, and Sweett Group

Table 1 below provides an overview of the number and type of boot camps held during the design development period.

Table 1 - Bootcamps held during the MMH design development period

Design Development Period	Bootcamp Type			
	Clinical	Technical	Ad hoc	Total
Oct – Dec 2014 (pre-interim submission)	17	28	3	48
Jan – March 2015 (pre-draft final bid)	52	39	30	121
May – June 15 (pre-final bid)	7	8	12	27
Total	76	75	45	196

Information and opinion provided within this report is based upon technical review carried out within these work-streams, design development boot-camps and evaluation processes.

4 Evaluation of Space

4.1 Gross Internal Floor Area Evaluation

Sweett Group has carried out an independent check of the Gross Internal Floor Area (GIFA) from the final draft bid & design submitted on the 2nd April 2015 by Carillion.

Sweett Group's measured area is 82,294m² which is very close to Carillion's stated area of 82,257m². At this stage of design we would expect to see some slight variation, the current variation of 37m² is considered within a reasonable tolerance level.

The Carillion area of 82,257m² excludes 1,629m² for the lift and stair towers and the connecting walkways on levels 6-9. This is 'untreated' space 'enclosed' by the Winter Garden.

Sweett Group regards the stair cores and landing areas at the end of the wards on levels 6 to 9 as 'non treated communication space'. These areas are not technically GIFA as they don't have an external wall, but function as communication space.

4.2 Benchmarking of Communication and Plant space.

Carillion's GIFA of 82,257m² comprises 61,640m² of departmental area with communication space at 10,729m² and plant at 9,888m² representing, together, 33.45%. This drawn area is greater than that scheduled.

The Public Sector Comparator (PSC) Schedule of Accommodation version 11 (SoA) area was 80,047m². Carillion's drawn area is greater than this by 2,210m².

The PSC SoA has plant space at 8,620m² plus an area of 1,046m² for the Energy Centre therefore totalling 9,666m² and Communication Space at 9,852m². (19,518/m² = 32.25% of floor area). Carillion's percentage provision of communication and plant space (20,617/m² = 33.45% of floor area) is slightly greater than the PSC, but within the range we would expect from our review of appropriate benchmarks.

Sweett Group has undertaken further detailed analysis & benchmarking of the Carillion final draft bid & design against the latest PSC design at the request of the Project Assessment Unit. The winter garden and enclosed courtyards have not been included within the GIFA calculation. These areas provide some functionality but are not treated spaces. The glazed walls and EPTF roof act as a weather shield and are not of a proper/traditional external wall construction.

The cost of these spaces has however been included within Carillion's scheme costs.

In summary, the areas associated with the building envelope for departments, circulation / communication and plant space are within the range & allowances we would expect for an acute hospital of the scale and configuration associated with the Carillion draft final bid and design.

5 Evaluation of Clinical Functionality

A robust clinical, operational, and technical assessment and evaluation of Carillion's final draft bid /design has been undertaken. Capita can confirm that all departments have been assessed and evaluated as meeting the minimum Trust requirement of 'adequate' (meets the requirements for all key criteria set out in the brief), and that the majority are assessed as being "good" (meets requirements / performs well for all key criteria and offers some additional benefits.) or better with regard to design and functionality against the ITPD evaluation criteria.

This includes:

- Co-locations / Adjacencies / Patient Flows
- Layouts and functional ergonomics
- Patient privacy, dignity and safeguarding
- Prevention and control of infection
- Impact on Workforce (patient observation, staff flows, LEAN working)
- Soft FM, goods flows, storage and segregation
- Provision and location of education and training facilities
- Business continuity and resilience.
- Future proofing

Capita can confirm that the 'as drawn' departmental circulation and whole hospital communication allowances are adequate to enable the required clinical functionality and flow separation and meet the Trust's requirements, and that the design achieves effective separation of clinical, visitor, and FM flows throughout the building.

There are a (4) departments listed below where 'as drawn' combined Planning, Engineering and Circulation total areas and Gross Departmental Areas which appear to be slightly less than the briefed allowances,

- Neonatal Unit
- Pathology
- Pharmacy
- Education and Training

Although the evaluation of these areas during design development boot-camps with clinicians / users indicated that there is no impact on clinical functionality. Work is ongoing to fully resolve these issues prior to Carillion's submission of the final bid & design in July.

Capita has reviewed the clinical planning of the current design, this review did not highlight any material clinical functionality issues, some minor design issues that needed further work were identified and have already been feedback to Carillion who have confirmed that these will be resolved prior to submission of the final bid & design.

Further commentary on how the Carillion design responds to the requirements of the Trust's brief is provided overleaf.

5.1.1 Response to the clinical model

Carillion's design demonstrates an effective interpretation of the Trust's clinical service models and health planning strategy, it responds to changes required in the Trust brief and to feed-back received from the Trust. It supports the delivery of services more effectively than the Trusts PSC exemplar design.

5.1.2 Co-locations / Adjacencies / Patient Flows

Interdepartmental adjacencies

Carillion's current design achieves all the required critical interdepartmental adjacencies and 97% of the essential interdepartmental adjacencies.

The design achieves 93% of target journey times the required, with only three journeys (ED to ICCU, ED to Theatres, and Imaging to SAU), currently missing the required time by 4 seconds.

Carillion's design delivers a 'Women's and Children's' zone at level 4 of the building.

Patient and staff car parking is provided undercover and co-located to facilitate flexibility of the car parking zones, providing direct access into the hospital.

Patient and visitor flows

Carillion's design enables effective separation of public and clinical flows by navigating the majority of public to level 5, then directing movement via clearly designated and segregated lifts. A clear way finding strategy is being developed to support the navigation and traffic management of patients, visitors and staff

Whilst flow from the Main Entrance to some departments is not as direct as those flows in the PSC, the overall separation of public and patient flows provided by the Carillion design is significantly better than the PSC and will enhance the privacy and dignity level experienced by patients.

The design has an absence of long public and ward corridors synonymous with hospitals. Horizontal movement on clinical levels/areas are restricted to less than 20m.

Segregated lifts (with sufficient capacity (N+1) to maintain services if a lift were to fail, or be unavailable), are provided by the Carillion design. Access to all departments for non-emergencies from the Main Public Entrance is a maximum of 3.5 minutes.

Further review of the current Carillion design against the PSC exemplar confirms the design offers:

- Significantly shorter journey times between ED and key departments (with the exception of journey times from ED to the Post natal ward and ED to Surgery Short Stay beds).
- Improved journey times from departments to Imaging, Integrated Critical Care and AMU.
- 50% more bariatric bedrooms provided effectively future proofing against changes in service demands.
- Provision of public bariatric toilet facilities at the Emergency and Non Emergency entrances and Level 5 Reception and Waiting
- Public circulation that enables the use of motorised scooters

Intradepartmental adjacencies

The intradepartmental adjacencies within the Carillion design meet the Trust brief requirements.

5.1.3 Impact on workforce

Patient observation

Carillion's design also improves on the PSC with regard to patient observation (within the context of projected staffing numbers and ratios), whilst maintaining appropriate patient privacy and dignity standards.

Staff flows

Carillion's design offers a short undercover distance for staff to access the building from the staff car park. Staff can access all departments within 2.5 minutes from the car park.

Staff change facilities are conveniently located close to clinical cores, and entry & exit points to departments. The design provides direct segregated clinical routes between departments.

Staff journeys to clean and dirty utilities on wards are short (ranging from 7 to 24 seconds).

The journey from theatres to recovery ranges from 17 to 51 seconds.

Supporting LEAN principles and efficient use of resources

Carillion design supports and facilitates LEAN working principles through the following:

- Short journey times
- Effective separation of clinical, public, and FM flows
- Central location of key support rooms within departments to minimise staff journey time
- Standardisation of room layouts to improve efficiency
- Colocation of cardiology services
- Colocation of paediatric services
- Equitable distribution of 'Staff change, rest' and administration' areas over each level of the building to facilitate efficient staff flows.

5.1.4 Soft FM and goods flows

Carillion's design provides clear dedicated routes (separated from clinical flows), supported by AGV technology, for soft FM flows through the hospital.

The Receipt and Distribution area enables separation of clean and dirty flows and central location of the AGV buffer conveyor supports minimal handling of goods.

AGV transfer/exchange stations are located within designated FM hub areas to support segregation of clean and dirty flows with additional clean FM store rooms to support the separation of clean and dirty flows.

Journey times for the receipt and distribution of goods to wards /departments stores ranges from a maximum of 6 minutes to as short as 2 minutes. Storage space has been provided as briefed and is designed to support LEAN working principles.

5.1.5 Education and Training

Carillion's design co-locates the 'Education and Training' facilities with junior doctor training accommodation and academic research department, locating these facilities centrally within the hospital to facilitate easy staff access.

All staff can access a meeting or seminar room from their respective departments in under a minute of travel time by walking. Three 'Clinical Skills' facilities are provided (two within Education and Training and one within the AMU).

5.1.6 Privacy, dignity and safeguarding

Privacy and dignity

The overall separation of public and patient flows is more effective in the Carillion design when compared to the PSC and will enhance the level of patient privacy and dignity.

Carillion's design enables effective gender segregation in clinical areas where required.

Accessibility

The Carillion design enables effective wayfinding with public journeys occurring in spaces where there will be no crossing over between with clinical or FM traffic.

Child support facilities are appropriately located.

Additional lifts have been provided to ensure the safe evacuation of bed ridden and mobility impaired patients (without the need to access stairs).

Visitor facilities

The Carillion design provides onsite under-croft car parking with a shuttle bus service being provided between the hospital and the Trusts Sandwell General and City Hospital sites.

The design facilitates visitor access by providing drop off spaces for ED, Maternity units and the Main Entrance.

5.1.7 Future proofing

Opportunities and recommendations for innovation and improvement

Specific clinical areas will be designed to recognise and respond to the requirements of patients with dementia. The latest research will be considered and used to inform decisions particularly with regard to furniture and equipment as well as finishes, materials and colours.

Carillion's design co-locates the ED and AMU/SAU areas to reduce patient travel distances between departments.

Carillion design provides theatre suite arrangements that meet the Trusts brief.

The immediate adjacency of shell space to Theatres/Recovery/ICCU provides the potential for a range of expansion strategies including the provision of a PACU.

Expansion and contraction

Carillion's design provides a building that has the capability to respond to changing operational and strategic requirements through the strategic adjacencies of areas and distribution of shell and soft space throughout the building. The design could allow for the expansion of additional:

- 96 beds (3x32) bed general acute wards, or other inpatient services.
- Plain and specialist imaging suites co-located within existing department

- Theatre and recovery facilities or 8 bed PACU
- Delivery rooms
- Specialist consulting / therapy rooms
- Generic outpatient accommodation.

Introduction of new technology

Carillion's design provides an enhanced level of infrastructure to support growth in demand for and use of IT technology, systems enabling:

- Robotic surgery and integrated theatre requirements to be accommodated.
- Digital migration opportunities including QR readers and electronic consent forms
- IT technology opportunities to support the patient journey including self check in, patient pathway tracking
- Automated Guided Vehicle's to support the delivery of soft FM services.

5.1.8 Infection control

Carillion's design delivers a high percentage of single bedrooms and offers enhanced patient safety by enabling potential expansion in the number of isolation rooms (a significant improvement on the PSC design). Key features of the design include:

- 278 single rooms (42% of all bed spaces)
- 56 isolation rooms (over 8% of all beds)
- Isolation rooms to support each clinical area plus larger clusters to enable designations of key wards e.g. Respiratory, Haematology
- Enhanced ventilation system to isolation rooms.

Carillion's design facilitates the management of infection outbreaks (with minimal disruption to clinical services) by provision of inpatient areas that can be designated for cohort nursing in the event of an infectious outbreak.

5.1.9 Moving and handling / Ergonomics

Carillion's design meets the requirements as set out in the Trust brief.

5.1.10 Business continuity

Continuity plan

Carillion's design can enable temporary increases in capacity within the ED, ICCU and AMU.

The design will enable infection outbreaks to be managed in a localised way, via simple designation of isolation zones with appropriate support and ventilation, to enable the majority of the rest of the hospital to function as normal.

The Carillion design locates key engineering services, plant and equipment in restricted / contained areas to minimise any impact on patients and staff or disruption to the functioning hospital. For example:

- Maintenance access to plant is separate to public and clinical flows
- Maintenance access to wards/departments is via additional circulation with “men working behind closed doors within risers” to minimise any departmental disruption and no ceiling access being required in clinical areas.

Major incident plan

Carillion’s design facilitates implementation of the Trust’s Major Incident Plan include:

- Sizing of the ambulance forecourt to support vehicle coordination and decontamination
- Inherent flexibility in the design of the Emergency floor (Level 2) to enable the temporary re-designation of facilities
- Effective separation of public and clinical flows
- Location of administration accommodation to support designation as control rooms
- Support for all levels of lock down: partial; progressive or full.

6 Architectural Summary Review

Carillion's design has been reviewed at each stage of the design development / 'Boot-camp' workshop process. Many key issues have been already been addressed, where issues have not been fully resolved a clear route or approach to address these has been established with the relevant Trust boot-camp workshop. None of the remaining concerns are considered insurmountable and can be attributed to personal preference/observation as opposed to any form of non-compliance.

6.1 General Overview

Carillion's design combines the car parking requirement and main hospital accommodation into a single building. This has significant efficiency in terms of utilisation of the site.

This efficiency driven approach towards the design of the hospital has led to a regularised construction grid being developed which is designed to and will support the construction of the hospital and achieve programme requirements.

The configuration of the car park, podium and residential wards addresses many of the concerns raised in relation to the PSC, exemplar e.g. staff access and patient/ vehicle access to the site. It is subjective whether the scale of repetition limits aspects of the hospitals design. In practice the scale and value the repetition offers material benefits in terms of the efficiency, effectiveness and economy of the hospital design developed.

The compact nature of the design releases part of the site for considered landscaping which will both frame the site and hospital whilst at the same time providing valuable amenity space for patients, staff, visitors and the local community.

Current external designs have also dealt with the need to segregate pedestrians, and vehicular traffic, the need to accommodate public transport services.

Compared to the PSC exemplar scheme, the Carillion proposal has resolved certain key adjacencies which were seen as 'compromises' with the PSC. This includes the adjacency of the AMU relative to the Emergency department, which are now all located on Level 2.

6.2 Departmental Overview

Carillion's design is compact and maximises potential efficiencies. The Maternity Department, Neonatal Unit, Postnatal and Antenatal wards are all stacked within the podium, at the same level and have improved access from external entrances than that achieved within the PSC exemplar.

The podium footprint effectively places the bulk of the hospital 'hot departments' into two floors of accommodation arranged around a series of light wells. The podiums are bisected by corridors which run between each of the different departments and allow for easy circulation and access from one to another in a safe and direct way.

Corridor widths allow for the safe passage of patients, goods (where applicable) and staff.

Above the lower podium level is a plant floor, which enables efficient plant distribution.

The winter garden is set above the plant level and is designed to help with navigating the large building and gives access from this level to the more residential ward accommodation above. The scale of this space has been positively evaluated through the design development and evaluation process as it offers significant opportunities to provide and be used for amenity, breakout and exhibition space.

The ward accommodation is arranged over 3 floors each accommodating three wards per floor, in line with the Trust briefing requirements. Each ward area is made up with a compliment of single and four bed wards and provides both isolation facilities and bariatric room provisions at each level in accordance with the brief requirements.

The compact floor design enables efficient communication and circulation routes throughout the scheme and allows for modern, fast vertical circulation to key areas.

Given the scale and mass of the hospital, its internal and external design, layout and accessibility have been consciously developed co-ordinated to minimise the impact for patients receiving services at the hospital wherever possible.

6.3 Goods & Traffic Distribution

Through the use of AGV's, the delivery of FM goods has been completely separated from both patients and clinical staff, thereby enabling efficient goods receipt and despatch throughout the working day and promoting the principles of LEAN initiatives identified within the Trust brief.

The Podium and car park stack helps to separate traffic flows; all deliveries are to the north of the building into the FM yard; staff and visitor vehicles are kept separate with visitors accessing into the multi storey car park from the south and visitors from the north.

Emergency blue light access is taken directly off the main road into the ED forecourt and through the dialogue period any concerns around congestion have been resolved by moving the position of the access road into the site.

The green to the front of the hospital works as a device for organising the Public Transport. This is easily accessible, with planned routes into the site, but also with easy pedestrian access to the main road to connect with express bus services.

The perimeter road is designed to enable delivery vehicle circulation and access for key emergency services. The road is designed to accommodate a lay-bye and tank storage for refilling medical gases without impeding the road/highway.

6.4 Summary of Architectural Evaluation

The review and evaluation of final draft bid & design submitted in April has confirmed that significant improvements on the interim bid & design submitted in December 2014. It has also addressed many of the shortfalls and unresolved issues associated with the PSC design.

This has been confirmed thorough the external Design Quality reviews which have been undertaken of both the interim and draft final bid & design.

The small number of issues which require further improvement (to achieve a standard above the evaluation criteria's minimum standard), have already been reported to Carillion who are responding to the feedback and have advised that the issues will be resolved prior to final bid submission.

There are no 'non-compliant' or insurmountable issues in relation to the Trust briefed requirements.

7 Provision of Engineering Plant and Services

Hulley and Kirkwood has advised that the plant, equipment and engineering services designs and proposals are well developed at this stage of design development and offer a robust solution against the Trust's Construction Requirements.

The evaluation of the final draft bid & design confirms that significant improvements have been made since the interim design bid & design submitted in December 2014.

Evaluation of design and bid deliverables identified further information being required re aspects of the design, co-ordination and distribution of engineering services and systems.

As well as lifecycle issues associated with the selection of components and equipment. Both of these issues are currently being responded to by Carillion.

Whilst the Trusts brief and requirements as set in schedule 8 will be met the scope for opportunities to identifying further improvement's remains under review.

Even where the achievement of a target has been confirmed this has not prevented the Trust seeking further improvements which Carillion continues to positively respond to, for example Carillion has sought a degree of betterment against the Trust's target of less than 42GJ/100m³ in terms of energy performance.

The requirement for the low and zero carbon technology has also been factored in to meet the mandated "excellent" target for BREEAM ENE01 courtesy of a 600kWe Combined Heat and Power system and 250kW Ground Source Heat Pumps located within the Energy Centre.

Contributing to a low carbon output is achieved through the widespread adoption of LED lighting with DALI control gear providing a low energy compliant response to a CIBSE Lighting Guide for Hospitals and Health Care Buildings (LG2).

Carillion has advised that provision of IPS will be in accordance with Table 26 for Schedule 8 Part 3 with UPS provision identified on ICT and key medical equipment (i.e MRI).

At a departmental level, provision for two separate lighting and two separate power boards has been made offering an approximate 50/50 split across the distribution.

Progress in developing the design and performance of building and engineering services is enabling various standards and targets to be achieved, e.g. air handling plant delivers a favourable solution to meet the required 10 air changes and a maximum room temperature of 25oC through a combination of chilled beams and a regulated supply air temperature.

Incoming gas is augmented with 35second oil supporting dual fuel boilers, which, along with the domestic calorifiers provide N+1 for heating and hot water.

Cooling, via multistage compressors is via 5 air cooled chillers again at N+1 with key IT areas providing N+N.

Additional "good practice" measures are employed on the building services with notable enhancements such as duplicate cold water storage, 100% standby on Medical Air, duplicate Medical Vacuum and 2No. VIE tanks all of which has been factored into the spatial requirements.

Maintenance and general access requirements have been developed and demonstrated within the submission highlighting vehicular access for plant and equipment to support ongoing operations and maintain operational continuity.

Business continuity arrangements associated with engineering services are well developed and reflect the need for site wide resilience, to ensure effective operation and maintenance of “critical services and equipment e.g. power supplies and generators, which in turn support critical services

Based upon the evaluation of the draft final bid submission and programme of further work to be undertaken to support the final bid, it is anticipated that the building and engineering designs and proposal will meet the Trust requirements.

.

8 Building Materials and Lifecycle

8.1 Proposed Design Materials

Through the Boot camp process, dedicated discussions have been held around the proposed finishes and Trust Construction requirements as set out in the Schedule 8 Part 3 Construction Requirements. This has been adhered to and proposals appear to comply with the design life criteria set out in section 2.5 of this Schedule, covering the key aspects of the building fabric (see extract table below). The proposed internal finishes have been measured and evaluated against the indicative finishes matrix and door type matrix provided as part of the bidder information and appears to comply with this requirement of the brief.

	Minimum Design Life
Structure, including substructure	70 years
Floor structure	70 years
Roof structure	70 years
External walls	45 years
External openings	25 years
External wall finishes	25 years
Roof coverings	30 years
External hard surfaces	Not less than 20 years to first major maintenance
Internal partitions	30 years
Doors	15 years
Internal finishes	15 years
Internal fixtures and fittings	15 years

8.2 Lifecycle

A detailed lifecycle model has been provided by Carillion in accordance with the bid deliverables. The lifecycle replacement periods taken within the model are generally in line with, or longer than, the minimum design lives stated in the above table.

9 Next Steps

DH has requested that this report highlight any material issues that prevent the bidder's design from adequately meeting the Trust's requirements (as set out in the brief), and steps that the bidder and Trust have agreed will be taken to remedy those problems without cost to the Trust.

This report confirms that the Trust's Technical Advisory team is comfortable that the building envelope set out in the single bidder's design is adequate to meet the brief set out in the Trust Construction Requirements.

As such, no specific further steps are recommended at this time beyond those required to progress design development of the scheme through the preferred bidder stage to financial close.

Given the positive responses made by the bidder to design development challenges throughout the boot camp process and in response to formal feedback on bid submissions, we have every confidence that the design finalisation process will deliver an appropriate design solution.



10 Risk Transfer

While the technical advisors have made every effort to ensure that their assessment of the bidder's design proposals is robust, it is important to note that design risk and the responsibility for delivering a design that is clinically functional and compliant with the project's design requirements remain the responsibility of the bidding team. As the project moves forward it will be incumbent on each of the partners to identify any elements of the design that are seen to be derogating away from this understood position.

APPENDIX 12c – INDEPENDENT REVIEW OF DESIGN AND DEROGATIONS

Sandwell and West Birmingham Hospitals NHS Trust
Midland Metropolitan Hospital Project
Final Business Case

Midland Metropolitan Hospital Development:



Independent Review of Design & Derogations

Review Team:

Virginia de Vere, MBA Health Care Planner.

Christopher Sherwood, B.Arch (Hons), Architect.

June 2015

MIDLAND METROPOLITAN HOSPITAL

INDEPENDENT REVIEW OF DESIGN & DEROGATIONS

for

SANDWELL AND WEST BIRMINGHAM HOSPITALS NHS TRUST

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OVERALL SUMMARY & CONCLUSION:

The design developed for the new Midland Metropolitan Hospital reflects the intensive period of design development that has been undertaken and the practices employed by the Trust to support and drive the design process.

As at June 2015, the design development process is ongoing and this will continue, the design and information received by the Reviewers is at a sufficiently advanced level and quality for the review to be undertaken. The design has moved on considerably since the single bidders final draft bid submitted in April. The design of the hospital has also been the subject of two externally facilitated "Design Quality Impact" reviews which have confirmed that good progress has been made in terms of the design of the hospital.

Whilst the focus of this report is on the derogations (from HBN and HTM guidance) associated within the design, there a small number of derogations where the design is still being developed or waiting to be amended. e.g. Dirty Utility.

The presentation of the review and analysis of derogations follows an established template format, followed by a paragraph detailing the conclusions of that analysis with reference to functionality, and the other criteria listed in the objectives of the report.

The conclusions are succinct in them-selves and are therefore not repeated here. What can be concluded is that, with very few exceptions, the derogations listed have no adverse effect on the functionality of the accommodation, individual departments or rooms, the wider hospital design or its overall functionality in terms of the designs ability to support and enable the delivery of the Trusts service models.

It is clear that the level of engagement and ownership of clinical staff secured in the design development process (and which will be maintained) through the hospitals construction and commissioning phases will ensure that the Trusts service models will continue to lead and influence the design of the hospital.

In the opinion of the authors, some of the rooms exceed the HBN example in at least one of the criteria analysed, and in some cases, several. The single bedrooms and their en-suites are one example, the Neo Natal multi-cot area is another. Reflecting where the design is, there are few issues/areas, (listed below), that require further design development and resolution; these have been identified/highlighted in the report, and in most cases were already being worked on. Indeed some of the issues identified by the review authors were resolved during the periods between review workshops/meetings.

- Review the number of w/c's to serve the multi bedded bays.
- Review Dirty utility rooms per ward and disposal practices.
- Review the design of the patient personal washing area's
- Testing of bed access into the multi bedded rooms. (against a full scale model).

On the evidence of our review, the author's consider resolution of the issues which require further consideration / resolution is achievable.

INTRODUCTION

Background:

The proposed Midland Metropolitan Hospital, and the services and service models it is designed to provide, is a central element in the “Right Care Right Here” programme. The hospital will be the culmination of a process that started in 2007, with an extensive local consultation exercise. The hospital will centralise acute, emergency, maternity and elective inpatient services, currently dispersed over 2 sites (City & Sandwell General Hospitals) – onto a single site. Into a hospital designed to support and enable the delivery of 21st Century care standards, utilising 21st Century technology.

Another important element of the service model is that the provision of some specialist, ambulatory, recovery and rehabilitation inpatient and outpatient services will be delivered from the Trust’s existing City & Sandwell Hospital sites which will provide the opportunity for future rationalisation.

The design of the new hospital has been driven by the Trust’s service models, operational policies, procedures and performance requirements.

The hospital is being procured through a PF2, procurement process, following the government’s current Public Private Partnership (PPP) model. The Trust is currently in dialogue with its single bidder. Since October 2014 the design has been progressed by the Trust, its project team, representative from across all medical/clinical and non-clinical departments, professional advisors, patients/service users, staff and other key stakeholders, its single bidder and their design team.

An interim bid was submitted in December 2014, and a draft final bid was submitted in April 2015. To-date 150+ design development (design, service and technical, multidisciplinary and specialist) boot-camps have been held. The design process continued throughout May and June and will continue into July, whilst the final bid is prepared and submitted.

This extensive design development and consultation exercise has been supplemented by visits to other hospitals, the construction of full sized mock-ups of selected key/critical areas of the hospital and its design proposals. At each bid submission stage the bid and its design has been evaluated against a range of “bid deliverables”, and an externally facilitated Design Quality Impact (DQI) review.

The design has been informed by a broad range of statutory and technical standards / guidance, including Department of Health Building Notes, (HBNs), and Health Technical Memoranda, (HTMs). The design is compliant with all statutory requirements, and guidance with exception of those derogations listed and analysed in this review.

Objectives of Review:

The Trust Development Authority, (TDA), has requested that the Trust undertakes a health care planning led independent review, of the design and derogations associated with the hospital. The Trust has commissioned this review, led by Virginia de Vere, Independent healthcare planner, supported and assisted by Christopher Sherwood, an experienced Architect who has specialised in healthcare design.

The Trust's brief was that the review should compare and analyse the design and derogations against standards and guidance, confirm whether the design supported the delivery of the Trusts service models, operational policies and procedures, and whether any derogations had a detrimental impact. E.g.

- Room size, critical dimensions & layouts.
- Functionality, accessibility, clinical adjacencies, segregation flows.
- Standards, Control of Infection, Privacy and Dignity.
- Patient Well-Being and Experience,
- Flexibility / Future-proofing,
- Technical / Environmental performance.

The design derogations relate to individual spaces / rooms, which cannot be examined in isolation of the overall hospital design and its ability to support the delivery of the Trust services and service models. The Trust asked that this be commented upon as part of the review to provide context. Whilst the review responds to and makes some observations on the overall design in the report, it is emphasised that the review does not constitute a comprehensive analysis and assessment of the whole hospital, the detailed design of which is still being developed.

Independent Review Team Members:

Virginia de Vere is a hugely experienced health planner both in the NHS and private health sectors. Her Health Planning portfolio includes some of the largest hospital PPP developments in the United Kingdom and she has been instrumental in informing the early methods of clinical design evaluation ahead of AEDET. Virginia has been commissioned both as Trust clinical design advisor and to champion the effective use of space in PPP bidding teams, as well as the development of standardised rooms and components. She has led a number of functionality reviews for healthcare clients

Chris Sherwood has extensive hospital design experience, both in the UK and internationally. He was a Partner/Director of Nightingale Associates, (now IBI), for 17 years, and led the architectural teams on five successful competitive hospital PPP bids, including Daren't Valley,

West Middlesex University, and Peterborough City Hospitals. Chris was a member of both the NHS Design Review Panel, and the Architects for Health Executive Committee, has been a speaker at several international conferences.

Review Process:

The review and associated activities have spanned a period of three weeks in June 2015. The activities included an information/briefing day and three desktop/workshops and meetings arranged and hosted by the Trust, at its City Hospital site, the information provided included:

- Planning and Design Standards Review (Trust document).
- Plans of levels 2-6 inclusive, comprising the clinical accommodation, at 1:200 scale, (levels 7-9 are similar to level 6). Levels 0 & 1 accommodate the car parking arrangements for the hospital.
- High level service model summaries
- Design vision documentation.
- Meeting/workshop with the Trusts;
Project, Technical and Service design / transformation teams. Fire Officer and Control of Infection Leads.
Medical and Clinical staff who had led on/represented service areas on the design of specific departments,
Health Care Planning (Capita) and Architectural (IBI) Advisers
- Visits to the full size mock-up of the single bedroom and en-suite, and the full size taped out floor template of a theatre suite.

The Trust medical and clinical staff who attended the meetings were fully engaged, and strongly supportive of the design and its ability to support and enable the delivery of the Trust's service models.

Overall Design and Configuration of the Hospital.

- The hospital, as proposed, will be a single building, with 10 storeys of accommodation, in a tower and podium arrangement.
- Parking is provided under the building at levels 0 & 1, - an arrangement that is more convenient, safer, and more effective than a car park located remotely from the building. Travel distances will be shorter, patients will be protected from rain, and they will be less likely to have difficulty finding the hospital entrances, - benefitting their initial experience of the hospital.
- Above the car parking levels, there are three podium floors, - levels 2-4, - containing all the clinical accommodation except for the generic inpatient wards, which are on four levels, - 6-9, - in the tower.
- The Main Entrance facilities, - including restaurant, retail outlets, and Bereavement Suite, are on Level 5. Public access to the Main Entrance concourse is by dedicated public lifts from the Car Parking levels, and Emergency Department.
- From the Main Entrance concourse, on Level 5, visitors and arriving patients go either up, or down, to the department they seek. This arrangement means that all the podium accommodation is exclusively clinical, thus enabling excellent departmental adjacencies with critical connectivity's to be achieved by either horizontal adjacency or direct vertical connection by lift. This in-turn then enables effective segregation between "clinical and public" and "clean and dirty" communication routes to be achieved. The hospital design provides an innovative solution to the perennial problem of the pressure on space on the ground floor and "hot" clinical departments of acute hospitals.
- Separate hubs including dedicated lifts are provided for each of the Clinical, Visitor and FM flows, achieving excellent separation of flows.
- Automated Guided Vehicles (or robots) will transport materials to and from the FM hubs, enhancing efficiency.
- There is a covered glazed "winter garden". This innovative feature will provide a sheltered environment with many of the attributes of an internal atrium / public space, but at a greatly reduced cost, both in terms of capital and revenue costs. This space significantly enhances the initial experience of the hospital for patients, visitors and staff.
- Overall, the arrangement of the hospital wards and departments on the podium levels, whilst traditional provides extremely efficient and effective configurations, layouts and functional template to support and enable the delivery of the Trusts service models.

Derogated Rooms- Inpatient Wards

Context of overall design:

- The wards on the upper storeys are arranged as “fingers”, linked at one end by ward support accommodation that includes the staff base. Every bedroom has access to natural light and an outlook either into the courtyards, or in the case of the external walls, away from the building, an arrangement, frequently seen in NHS hospitals.

Separation of visitor and FM access is achieved by separate entry points from the separate lift hubs.

The wards have 50% single bedroom & en-suite accommodation, and groups of four bedded bays arranged around the ward corridor, which also incorporates a nurse base / touchdown and passing bay facilities. This improves observation into and out of the bedrooms to the benefit of patients and staff and responds specifically to the service model and working practices to be employed by clinical staff, e.g. working closely with patient on the wards/bedrooms rather than from a centralised nurse base / station. The corridor design avoids the long unbroken parallel corridors, associated with more traditional hospitals.

- The design of the single rooms, with an angled wall aids both observation and outlook and should also enhance aspects of the patient experience. This approach and layout has also helped to maximise configuration and layout of these spaces.
- In practice the effective design and configuration of the space associated with single bedrooms and en-suites, to enable the touchdown base and passing bays to be accommodated significantly improves both the functionality and utilisation of the space available on the wards and enables the delivery of service models and working practices.
- The four bedded multi-bed bays are traditionally arranged with two pairs of beds on opposite walls, located in parallel. The touchdown base which in the HBN is located within the bed-bay is located in the corridor, with a window allowing observation to the beds. The bed bays have a collocated assisted shower/w/c /whb ensuite arrangement, - the HBN does not stipulate an additional w/c, but does comment that two is “convenient”. The Trust is considering whether an additional w/c is needed as part of the ongoing design development process.

- It should be noted that the design development process practiced by the Trust and its single bidder of, identifying exemplars and best practices through research and visits, developing concept drawn arrangements and layouts - which are then drawn at 1:200 and 1:50 scales to inform the boot-camps review and evaluation of designs, has also led to and secured the positive engagement and ownership of all staff to the designs developed. To provide further testing capacity and assurance for staff full size mock ups have and will continue to be provided for staff.

Single Bedroom

Derogation: - Size – Room 3.5 sqm less than HBN recommended size.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Polygonal shape places bed at angle, provides outlook through window at 45 degrees instead of usual 90 degrees, also aiding observation by staff.</p> <p>Bed side space not as rectilinear as HBN, but close in overall area & meets critical dimensions</p> <p>Ensuite located adjacent to bedhead and on same wall, reducing risk falls, responds directly to bed to ensuite journey being the most common reason for patient falls.</p> <p>Part of Clinical Support space, being used to provide touchdown base external to bed room, provides excellent observation and promotes privacy and dignity issues. This design and use of available space increases the effective</p>	<p>Mock-up constructed, demonstrates that bedroom not compromised by size. The Trust has advised that clinicians are satisfied with functionality.</p> <p>The HBN shows that the activity zones function separately, in dedicated space. In the SWHB design, these zones overlap, but this is not considered a problem as in practice these activities will not take place simultaneously, e.g.</p> <p>There is a slight pinch point when relative's recliner is shown, but this would only apply at night, and not during treatment or normal visiting. This is easily overcome by moving the recliner.</p>	<p>Compliant, clinical wash hand basin provided immediately on entering the room.</p> <p>Arrangement facilitates isolation lobbies where required</p> <p>Isolation lobbies include clinical hand wash and PPE</p> <p>There is mobile storage within the bedrooms to limit the risk of cross infection and/or waste</p> <p><i>Ventilation regime presumed to be commented on by others</i></p>	<p>Good, - room has natural light, ventilation, and outlook.</p> <p>Angled bed position provides excellent outlook at 45 degrees from bedhead.</p> <p>Direct line of sight to corridor allows patient to see activity in corridor and at touchdown</p> <p>No line of sight from corridor to ensuite if ensuite door is open.</p> <p>Consideration of arrangements for control of blinds to windows & doors acknowledged by the Trust</p>	<p>Appropriate for single room, - arrangement allows isolation lobbies to be added without compromising room or circulation, though when two pairs of isolation lobbies are opposite, (occurs in 3 locations), - corridor width is below HBN recommendation for a few metres, - (not thought generally to be an issue)</p> <p>Rooms largely standardised across hospital.</p>

<p>total useable space of the single room functions).</p> <p>The outward opening door to a recessed corridor also allows the room space to be used more effectively</p> <p>Information shows bed tracking diagrams that indicate bed access to the bedrooms is not compromised by their shape.</p>	<p>Note: Single rooms in the Paediatric, Antenatal and Postnatal wards are larger, and provide greater space for the family support zone.</p> <p>There is also Relatives overnight accommodation located at Level 5</p> <p>All equipment provided except touchdown which is adjacent and some fixed storage, in accordance with Trust policy of using mobile storage</p> <p>Door to ensuite located adjacent to bedhead and on same wall, this reduces the risk of falls for patients.</p> <p>Staff observation of patient is excellent from corridor and/or touchdown base.</p>			
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Conclusions

Clever / innovative room design that seems to achieve required clinical functionality, and minimisation of fall risk, with excellent observation of patient, and better than norm outlook, in a room, that at 3.5sqm below HBN, is more space efficient and therefore more cost effective than the HBN. Construction of mock-up demonstrates functionality to Trust. Added benefits include the external staff touchdown, with line of sight to the head of the patient's bed, and the creation of passing places in the corridor, avoiding monotonous unbroken parallel corridor walls reminiscent of older institutions.

Ensuite to Single Bedroom

Derogation: - Size – Room 0.1 sqm less than HBN recommended size.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Very small reduction in area relative to HBN size.</p> <p>Polygonal shape has planning benefits for the bedroom, but also allows a functional ensuite plan, - shower is located at opposite end of ensuite from door, minimising risk of water spillage</p> <p>Ensuite located adjacent to bedhead and on same wall, reducing fall risk.</p> <p>Space provision sufficient for ambulant and assisted patient use, - and more specifically tailored to dual assistance for the WC, - but not compliant for independent wheelchair users. There is separate provision for independent wheelchair users and bariatric patients.</p>	<p>Mock-up with all key sanitary ware constructed, demonstrating that ensuite not compromised by size.</p> <p>Trust has confirmed that mobile hoist access tested in the mock-up of the single bedroom ensuite</p> <p>Door to ensuite located adjacent to bedhead and on same wall, again to reduce risk of falls</p> <p>Space provision sufficient for ambulant and assisted patient use, but not compliant for independent wheelchair users, but there is separate provision for wheelchair users and bariatric patients.</p>	<p>Compliant</p> <p>Noted that all maintenance/repairs only possible by entering the ensuite but this is no different to many HBN solutions.</p>	<p>Satisfactory, 50% single room ratio is compliant with HBN.</p>	

Conclusions

Derogation is extremely small, current ensuite design achieves required clinical functionality, while supporting the single bedroom design and its benefits. Construction of mock-up demonstrates functionality to Trust, who advised that clinical team are satisfied with the design.

4 Bed Multi-bed Bay

Derogation: - Size – Room 3.7sqm less than HBN recommended size.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Space allocation reconfigured to achieve by relocating staff touchdown and clinical supplies space from inside bed bay to corridor so the real total functional space allocated to the room remains approximately the same.</p> <p>Bedside space and shape not quite as rectilinear as HBN, but close in overall area and meets critical dimensions</p>	<p>Whole multi room tested in full scale floor mark by the Trust.</p> <p>Doors open inwards to the room (inconsistent with single room operation). The design has adjusted the position of entry clinical wash hand basin to allow easier entry for bed.</p> <p>Trust is double checking the bed tracking turning from relatively narrow corridor into a bedroom with 1500mm door-set</p> <p>All equipment provided in room except touchdown and some fixed storage, in accordance with Trust policy of utilising mobile storage (both elements adjacent room).</p> <p>Staff observation of patients from touchdown already better than HBN & being considered for further enhancement.</p> <p>However observation requires refinement for observation of other beds if bed adjacent touchdown has curtains drawn round bed. The location of the touchdown in the HBN example would also be compromised by drawn curtains.</p>	<p>Bed spacing compliant at 3.6m.</p> <p>Only one clinical wash hand basin was provided in arrangement first provided, therefore non-compliant, - but updated plans issued by Carillion after meetings, show a second clinical wash hand basin, which will be compliant.</p>	<p>Compliant and satisfactory, ensuite provided, bed bay has natural light, ventilation and outlook,</p> <p>However the arrangement of beds, which directly face each other, while no worse than HBN example, has been avoided in some recent hospital developments.</p> <p>One disadvantage of multi-bed bays is that some patients' sleep is disturbed by the noise created by 3 other patients, and staff activity in the room. The external touchdown will reduce the level of staff activity within the room, benefitting the patients.</p> <p>The bed bays have only one ensuite, - the HBN does not stipulate an additional toilet, but does comment that two is "convenient". However additional toilet facilities will be available close to the bed bays</p> <p>Each ward has dedicated group social space.</p>	<p>The multi-bed bay is generic and repeatable.</p> <p>Carillion have also shown how a 4 bed bay can be converted to 2 single rooms at a future date, if required. <i>(although assume plumbing networks have not been included).</i></p>

Conclusions

The proposed Multi-bed bay achieves required clinical functionality, and satisfactory compliance with other criteria, despite the slight reduction in area, - which in reality is just a relocation of the staff touchdown and holding of clinical supplies from the room to the corridor, - space for other activities is not reduced. However access for beds requires confirmation by bed tracking.

Ensuite to 4 Bed Multi-bed Bay

Derogation: - Size – Room 0.5 sqm less than HBN recommended size.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Reduced space provision, critical dimensions and shape, sufficient for ambulant patient use, but single side assistance only to WC (inconsistent with single rooms). Mitigated by the provision of dual assisted WC /shower in vicinity of multibays</p> <p>The ensuites are not compliant for independent wheelchair users, - there is separate provision for wheelchair users and bariatric patients, and a separate fully assisted shower/WC for those patients requiring a higher level of assistance, located to support the multibed bays</p>	<p>Space provision sufficient for ambulant patient use, but single side assistance only to WC. Mitigated by the provision of dual assisted WC /shower in vicinity of multibays</p> <p>There is a separate provision for independent wheelchair users and bariatric patients and a separate fully assisted shower/WC for those patients requiring a higher level of assistance, located to support the multibed bays.</p> <p>All fixed equipment provided and Trust confirms reviewed for hoist access.</p>	<p>Compliant based on information provided</p> <p>Noted that all maintenance/repairs only possible by entering the ensuite but this is no different to many HBN solutions</p>	<p>Compliant, ensuite located just off main bed area for greater privacy of use</p> <p>An additional wc would enhance patient convenience, as it would allow use of a w/c, but needs to be balanced with maintaining good observation into the bay.</p> <p>The Trust is considering this as part of its design review.</p>	N/A

Conclusions

The proposed Multi-bed Ensuite design achieves required clinical functionality, within the context of the Trust's Model of Care, which allows for separate provision for patients with special needs eg. wheelchair users. It is compliant in other criteria.

Ward Corridor

Derogation: - Width – For a small limited distance (10m) corridor clear width 150mm less than HBN recommended size for corridors for bed/patient trolley traffic, - this is addressed by the incorporation of passing bays. HBN recommended width is 2150mm, ward corridors at 2100mm between ensuites, and 2000mm opposite Isolation lobbies, are derogated from the HBN corridor recommended width by between 50-150mm.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
HBN recommended width is 2150mm, in fact except for passing places, ward corridors at 2100mm between ensuites, and 2000mm opposite Isolation lobbies, are derogated from the HBN corridor recommended width by 50-150mm. Generally, concept of passing bays appears to work well, and passing places constitute a significant proportion of the length of the corridors, allowing reduction in elements of corridor width	The dimensions of 2100 & on rare occasions 1900 appear to work when tested for bed tracking. The Trust is currently considering handrail options that minimise corridor intrusion.	Control of infection adviser content with passing bay solution based on estimated patient movements with intended model of care	Visually interesting corridor, design developed beneficial to way finding and room identification, with the staff touchdowns bases also providing reassurance to patients. Privacy and dignity improved on traditional corridors designs.	N/A

Conclusions

The proposed ward corridors are, for some of their length, narrower than the HBN recommended widths, but due to the presence and length of the passing bays should, subject to handrail solutions, achieve the required functionality. Their design, with the passing places and touchdowns, has benefits to patient well-being, and staff working practices.

Consultation / Examination Room

Derogation: - Size – Room 2.0 sqm less than HBN recommended size.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Some reduction in space, from HBN achieved partly by overlap of space allowance for consultation and examination activities, and also by a different arrangement of equipment and furniture compared to the HBN example.</p> <p>Layout shows that key dimensions met e.g. minimum clear 800mm around three sides of couch, couch will be turned round for greater access to head of patient)</p>	<p>Not significantly compromised by smaller size. Appears adequate for most adult specialties.</p> <p>Paediatric consulting may potentially need to accommodate more people in the room. (The Trust is considering a more whole room approach for paediatric c/e room)</p> <p>Consultation and examination do not occur simultaneously and a carer can remain within the consultation zone when the patient is examined.</p> <p>Examination couch is dual access.</p> <p>All general equipment provided.</p> <p>Although space around consultation desk is less than HBN, functionality retained.</p>	<p>Compliant, - clinical wash hand basin provided in good location, closer to head of couch than HBN example.</p> <p>Trust is considering adjusting location of basin to reduce risk of splashing to adjacent curtain.</p>	<p>Compliant and satisfactory, normal curtain arrangement provides privacy to examination area.</p> <p>Control of infection requirements override privacy in placing the clinical WHB in the examination area as in HBN</p>	<p>The Consulting / examination room is generic and interchangeable with Treatment room, subject to ventilation requirements.</p>

Conclusions

The proposed Consultation / Examination room achieves required clinical functionality, and satisfactory compliance with other criteria, despite the reduction in area. The Trust may adjust the arrangement of loose equipment to better cater for paediatric requirements.

Treatment Room

Derogation: - Size – Room 2.0 sqm less than HBN recommended size.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Some reduction in space, achieved by a different arrangement of equipment and furniture compared to the HBN example, - specifically, relocation of the clinical wash hand basin.</p> <p>Room still achieves good space around the trolley/couch</p> <p>Trolleys are mobile and can be placed where best required.</p>	<p>Not compromised by smaller size.</p> <p>Treatment couch is dual access, clinical wash hand basin in good position.</p> <p>All general equipment provided.</p>	<p>Compliant, - clinical wash hand basin provided in good location, closer to head of couch than HBN example.</p> <p>Trust is considering adjusting location of basin to reduce risk of splashing to adjacent curtain.</p> <p>Generally on wards treatment room is close to disposal for removal of waste</p>	<p>Compliant and satisfactory, normal curtain arrangement provides privacy to examination area.</p>	<p>The Treatment room is generic and interchangeable with Consult/Exam room.</p>

Conclusions

The proposed Treatment room achieves required clinical functionality, based on design, and the Trusts service model and operational policies.

Clean Utility Room

Derogation: - Size – Room 4.0 sqm less than HBN recommended size.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Clean Utility 4sqm smaller than HBN 00-03, Pharmacy Support space is included.</p> <p>With reference to larger option 1 in HBN 00-03, a reduction in space achieved through use of pharmacy robotic dispensers to support pharmacy provision within the ward.</p> <p>HBN allows approx 8sqm for pharmacy support, the pharmacy provision of this room is 4sqm.</p>	<p>Not significantly compromised by size, clear areas of work including for robotic dispensing, It is noted that the design of the robot is yet to be fully detailed and therefore ongoing review of this room design is important.</p> <p>At present two good areas of worktop preparation space exist</p> <p>Temporary holding of dressings trollies shown on plan as large storage trolley - will be adjusted to allow compliant working space at the side of the room</p> <p>Other areas of storage on the ward & at hub.</p>	<p>Compliant, - clinical wash hand basin provided in good location, at entry to room.</p> <p>Control of infection adviser has requested the provision of a sink in the clean utility for the mixing of Chlor-Clean and disinfection of returned dressings trollies rather than use the dirty utility for this function.</p> <p>Clear protocols will be in place to avoid the mixing of clean and dirty activities in the room</p>	N/A	N/A

Conclusions

Subject to the detailed design of the pharmacy robotic dispensing unit, the proposed Clean Utility room broadly achieves required clinical functionality, and satisfactory compliance with other criteria, despite the reduction in area.

Dirty Utility Room

Derogation: - Size – Room 4.0 sqm less than HBN recommended size.

The design of the dirty utility room is currently being redesign as part of the normal boot-camp design development process. The design will be received by the Trust week beginning 29th June 2015.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility

Conclusion,

Once available the design will be reviewed by the Independent Reviewers and reported back to the Trust

Neo Natal Multi-Cot Nursery

HBN recommendation for actual cot cubicle is 13.5sqm, Trust proposed cubicle is 12sqm, (scaled from drawing), so actual cubicle is derogated from the HBN recommended size by 1.5 sqm.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>HBN recommendation for actual cot cubicle is 13.5sqm, Trust/Bidder proposed cubicle is 12sqm, (scaled from drawing), so actual cubicle is derogated from the HBN recommended size by only 1.5 sqm</p> <p>Room smaller than HBN recommendation partly because some functions will take place elsewhere, eg. Milk and feeds storage will be located in a separate milk kitchen, adjacent to bed bay, and bulk of pharmacy prep will be in the Clean Utility, - though the latest Carillion design has some storage in the multi-bay.</p> <p>Cot space and surrounding access equal to HBN.</p> <p>Staff base located in cot area, HBN has remote staff base</p>	<p>Not compromised by smaller size, - critical dimensions as per HBN</p> <p>Addition of staff base in cot area enhances functionality through improved staff observation and reduced staff travel distances.</p>	<p>HBN recommends minimum of one scrub sink per two cot bays, readily accessible from each bay. MMH proposal will have one clinical hand wash basin to every cot, located within the cot bays, - exceeds HBN minimum numerical provision. The Trusts Control of Infection advisors to consider the activities that are expected in the multi bay area and advise if this arrangement preferred. (Note that procedure room with scrub is sited nearby)</p>	<p>Compliant</p> <p>Proximity of staff base will be a reassuring enhancement for anxious parents.</p>	<p>Limited, though this is not normally a priority in this area, there is limited repetition.</p> <p>Some scope for future division of cot bay into separate nursery rooms <i>(subject to services)</i>.</p>

Conclusions

Despite a small area derogation, by including the staff base within the multi-bay, and clinical wash hand basins in every cot bay, the proposed Neo Natal Multi-Cot Nursery exceeds the required clinical functionality on some counts, and the support facilities that are omitted from the multi-bay are provided close by, in an arrangement, - that the Trust advise, - has clinician support. It is compliant in other criteria. The overall design is therefore at the very least satisfactory.

Theatre Suite

Context of overall design:

- The Trust Model of Care means that the theatres are for Inpatients, and Emergency patients requiring surgery, many patients will proceed to theatres directly on the day of surgery/admission.
- Day surgery will be carried out at other sites.
- There are 11 theatres; the Trust service model requires that they be identical and not handed.
- There is a separation of flows in and out of each theatre, so that patients, theatre surgical staff and clean materials enter the theatre from one side, while dirty material leaves the theatre from the other side, via a central “Dirty Core” serving all the theatres.
- Patient transfer to theatre trolley takes place before proceeding to the theatre suite but it is not clear where transfer back arrangements take place
- Each theatre is “stand alone”, and does not share facilities with adjacent theatres, so that in the event of a failure, maintenance or local decontamination, only the affected theatre(s) will be out of service.
- The main circulation corridors have access to natural light and outlook enhancing the well-being of patients and staff.
- Although the size of each theatre exceeds 55sqm, some of this area is circulation, - the usable area of each theatre is 55sqm, - equal to the HBN.
- Scrub rooms are not shared, and are accessed from the theatre space.
- The shape of each theatre suite, and the structural grid mean that within the space available, the Anaesthesia room is not as wide as HBN examples, though its total size exceeds the HBN examples because it is longer this is shape rather than derogation issue.
- Medical and Clinical staff involved in design development in all areas and have confirmed the functional suitability of the design proposals.
- Each theatre has a dedicated sterile preparation room.

Operating Theatre

Derogation: - Size – Room 9.6 sqm larger than HBN example.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>At 64.5 sqm, larger than Trust brief, and HBN, but the additional space is circulation within the theatre, which is in the space allowance for an exit bay in the HBN.</p> <p>The space within the theatre for the clinical procedures is equal to the HBN at 55sqm.</p> <p>The Trust has advised that medical and clinical staff involved in design development, Full sized mock up to be to be developed.</p>	Functionality compliant to HBN	Compliant	Standard theatre environment, but use of Anaesthesia rooms will reduce the anxieties of some patients' who might find anaesthesia in the theatres intimidating.	All the operating theatres are generic and identical, allowing complete flexibility of use.

Conclusions

The proposed Operating Theatre achieves the clinical functionality described by the HBN, and satisfactory compliance with other criteria. The apparent excess in the area of the theatre is offset by the omission of an exit bay, as it is this space, incorporated in the theatre, that generates the "excess". Therefore the overall space allowance is not excessive.

Scrub Rooms

Derogation: - Size – Room 0.2 sqm less than HBN example.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Scrub rooms not shared, comprise a recessed area accessed directly from theatre.</p> <p>Size reduction extremely small, relative to HBN for a recessed Scrub room.</p> <p>Critical dimensions around scrub trough in accordance with HBN, however gowning space restricted, as it would be in the HBN example.</p> <p>Room has been taped out on floor at City Hospital. The Trust has advised that clinicians have looked at the layout and are satisfied with its functionality.</p>	Functionality compliant to HBN	Generally compliant, the Trust is reviewing risk of water spillage from the Scrub room.	N/A	Limited, as each theatre has dedicated Scrub Room.

Conclusions

Despite an extremely small area reduction, the proposed Scrub Room achieves the clinical functionality described by the HBN, and generally satisfactory compliance with other criteria, but the issue of possible water spillage requires further consideration and risk management.

Preparation Rooms

Derogation: - Size – Room 0.7 sqm less than HBN example.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>Prep rooms not shared.</p> <p>Prep room is smaller than HBN so there is insufficient room for a trolley in the centre of the room as shown on the HBN.</p> <p>The Trust has advised that clinicians have looked at the layout both on 1:50 plans and on the room taped out on floor at City Hospital, and that they are satisfied that it contains all the appropriate equipment with space to ensure functionality.</p> <p>Prep for operations with high tray usage will be in the theatre within the ultra-clean air zone.</p> <p>Prep rooms will be supported by a large bulk store, clean instrument library and large sterile supplies store.</p>	<p>Prep room is smaller and more elongated than HBN the Trust has advised that clinicians have looked at the layout both on 1:50 plans and on the room taped out on floor at City Hospital, and that they are satisfied that it contains all the appropriate equipment with space to ensure functionality.</p> <p>Prep room design respond to Trust service model and operational requirements.</p>	<p>Generally compliant, individual Prep rooms are better than shared, in terms of reducing the risk of cross-infection.</p> <p>The Trust is exploring further options for restricting access into prep? is interlocking required of the two doors into prep?</p>	N/A	<p>Limited, as each theatre has dedicated Preparation Room.</p> <p>However separation has advantages when maintenance work is required.</p>

Conclusions

The proposed Preparation Room achieves the clinical functionality outlined by the HBN, the Trust advises that its medical and clinical staff have been involved in developing the design functionality will not be compromised.

Anaesthesia Room

Derogation: - Width – Room width less than HBN examples.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>At 20sqm, larger than Trust brief, and HBN, but critical issue is width.</p> <p>However at the critical head area, the 2900mm, (scaled from drawing), is clear, as fixed equipment has been arranged to avoid intrusion on space around trolley/bed, so this area is not restricted by fixed equipment/furniture on the walls, as in the HBN example.</p> <p>Room has been taped out on floor at City Hospital. The Trust has advised that Anaesthetists have looked at the layout and are satisfied that there is sufficient width at the head of the bed if there is no fixed furniture against the wall at that point.</p>	<p>Compliant as drawn.</p> <p>Room has been taped out on floor at City Hospital. The Trust has advised that Anaesthetists have looked at the layout and are satisfied that there is sufficient width at the head of the bed if there is no fixed furniture against the wall at that point.</p> <p>Although patient transfer takes place before the anaesthetic room the Trust will review its total transfer arrangements to and from theatres to ensure these are as patient friendly and efficient as possible</p>	<p>Consider whether tight linear plan allows sufficient separation of functions</p>	<p>Anaesthesia rooms are not as intimidating for a patient as a theatre, and therefore are a positive with reference to the patient's journey and experience.</p>	<p>Could work as patient holding space if anaesthetising moves into theatre.</p> <p>Other options include robotic work-point for theatre, or yield additional space back to future theatre/hybrid configuration.</p>

Conclusions

The proposed Anaesthesia room achieves required clinical functionality, and satisfactory compliance with other criteria.

Critical Care Cubicles

Derogation: - Size – Room 3.0 sqm less than HBN example.

Shape / Room arrangement / Critical dimensions	Functionality	Control of Infection	Patient well-being / Privacy and Dignity	Flexibility
<p>No difference in actual cubicle space, -higher area in HBN is based upon the requirement for space at the foot of the bed when there is circulation space between opposite beds. Cubicles are “single loaded” in MMH proposals, with central staff base.</p> <p>Therefore no sizing issues apparent</p>	<p>No sizing issues apparent, space allowance reduction does not compromise functionality.</p> <p>Central Staff Base arrangement enhances observation</p> <p>Decision to use curtains rather than full enclosure was taken by Trust after visits to other hospital ICUs, - regarded as safer for patients due to being able to hear patients and staff calls for help.</p>	<p>Compliant</p> <p>Curtains to bed space rather than doors no worse than open plan option in HBN. Trust Control of Infection advisors have found no greater incidence of infection between curtained areas to those with doors.</p>	<p>Curtains to fronts will reduce privacy, - especially acoustic privacy, but Trust clinicians believe that safety benefits to patients outweigh loss of privacy.</p>	<p>Cubicles may be converted to enclosed rooms as space allowance equals HBN space allowance for single rooms (marginal loss due to partitions).</p> <p>Proposals identify expansion strategy.</p>

Conclusions

The apparent area reduction is not in reality a reduction in the area of the cubicle, so the proposed Critical Care Cubicle achieves the clinical functionality described by the HBN, and satisfactory compliance with other criteria, and the central staff base is an added benefit.

FIRE STRATEGY:

Ward Finger Fire Escape Provision

Recognising the specialist, technical, design and specification issues which need to be considered and the limited knowledge in this area, it was necessary for the reviewers to rely upon on the information provided by the Trust and its staff/advisors. This is summarised below:

The fire strategy and design proposals are going through the normal process of development and statutory approvals, both internal and external e.g. Building Control.

The strategy provides a fire engineered solution which includes the installation of an automatic sprinkler system. Detailed fire and smoke modelling exercises, have taken place as part of the design development process. Proposed means of escape, travel distances etc have been reviewed.

The Trusts Fire Officer as well as Trusts professional M&E project consultants / advisers have been involved and will continue to be involved with the design development and external statutory approval process of/for the Hospital.

