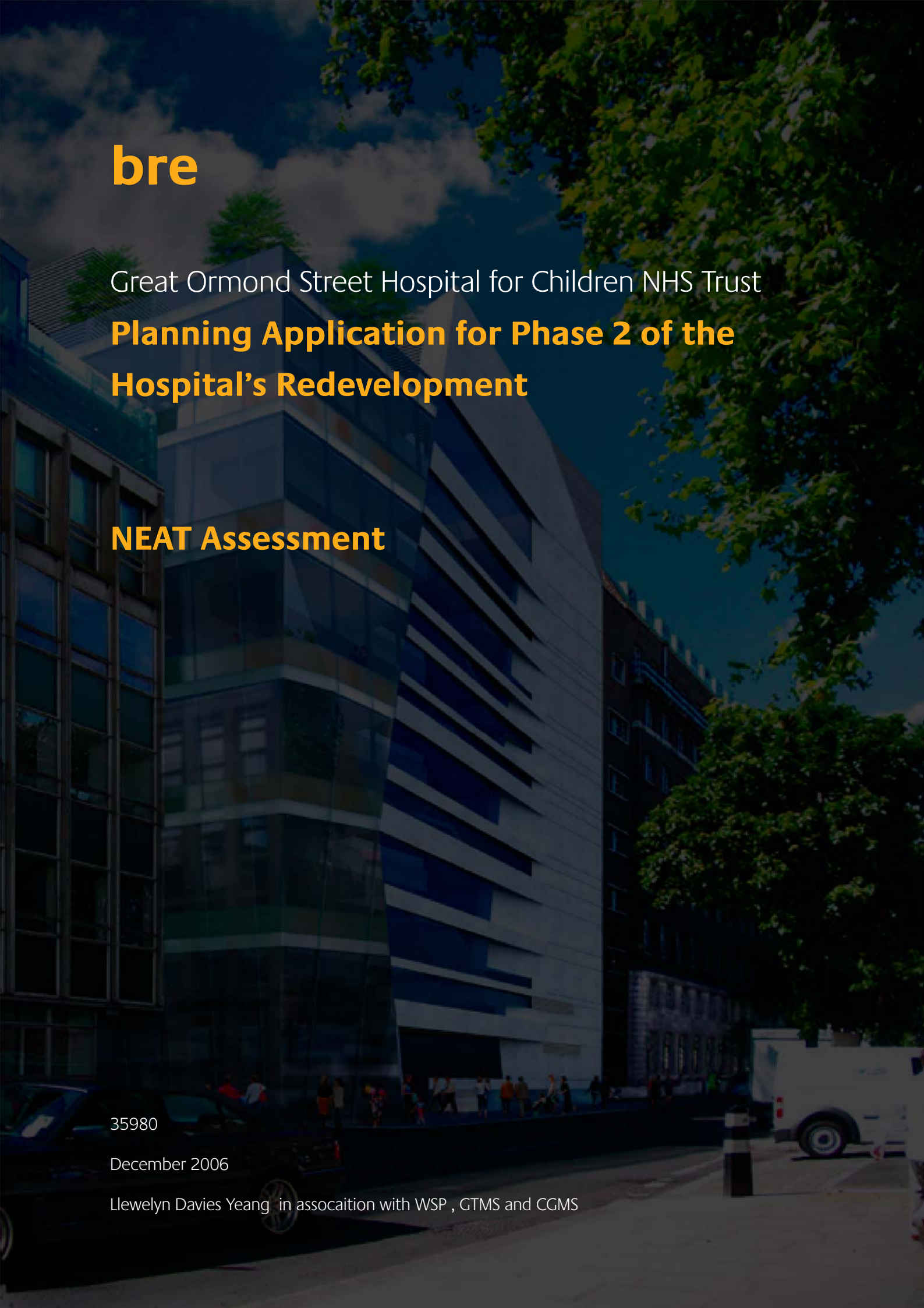

bre

Great Ormond Street Hospital for Children NHS Trust

Planning Application for Phase 2 of the Hospital's Redevelopment

NEAT Assessment

35980

December 2006

Llewelyn Davies Yeang in assocaition with WSP , GTMS and CGMS

Great Ormond Street
Hospital for Children
NHS Trust

Great Ormond Street
London WC1N 3JH

Tel: 020 7405 9200

10th April 2007

Barrington Bowie,
Principal Planner - Major Projects
Planning Services, Development Control
London Borough of Camden
Town Hall, Argyle Street
London, WC1H 8ND

Dear Barrington,

Re: Great Ormond Street Hospital – Phase 2 Redevelopment
Delivery of Camden Planning Guidance BREEAM / NEAT targets

On behalf of Great Ormond Street Hospital, I am writing this letter, as Director of Redevelopment, to address the issues raised in your pre-application meeting report, dated 17 January 2007, regarding the achievement of Camden's Planning Guidance on BREEAM (NEAT) targets.

The Hospital Redevelopment Board fully recognises the specific Camden Planning targets of 60%, 60% and 40% for the categories of energy, water and materials, respectively, as well as the target of achieving at least a 'very good' overall rating and intends to better these targets.

You should note that an NHS Environmental Assessment Tool (NEAT) **'excellent '** rating is the Department of Health mandatory requirement for all new and refurbished buildings. To ensure that an excellent rating is achieved at building completion, it is important to audit the NEAT rating at key design and procurement stages whilst there is still the opportunity to influence the final rating.

To audit the design against the NEAT criteria, the Hospital has directly engaged the independent assessment organisation British Research Establishment (BRE), the authors of BREEAM, to produce a bespoke BREEAM for healthcare buildings to enable audit the environmental performance of the Phase 2 Redevelopment and thereafter to undertake an interim assessment at each stage of the design.

It must be recognised that currently we have only completed the design to Stage D (Scheme Design) for Planning and Full Business Case submissions and are now moving into Stage E (Detail Design) to produce definitive design solutions.

You will note from the NEAT score results at stage D submitted to you on 22nd January 2007 that the independent assessor would only give points where hard evidence has been presented as Design Team and Hospital documentation. However, the assessor has provided a second column of points scoring to enable him to calculate the final NEAT scoring if the information that has been provided within the scheme design strategy is translated into design documentation.

We firmly believe that we are on track to deliver this translation.

For the specific targets for the categories of water and materials, you rightly acknowledged that we are currently on track to achieve these, subject to the submission of further information to confirm one or two of the credits (we have already achieved 56 % for water and 38 % for materials).

With regard to energy, we note your concern that only 12% of available credits are currently demonstrated in documentation. However, a large proportion of the remaining credits will be achieved with the submission of further documentation by the Design Team during Detail Design, including the inclusion of the Phase 2 combined heat and power (CHP), and we are confident that the 60% target will be improved.

This design information will be incorporated in the next NEAT assessment (stage E), which will be undertaken at the end of detail design (end of May 2007).

We hope that this commitment provides you with the assurances that you need to demonstrate compliance with the Camden Planning Guidance targets for the purpose of the planning application.

You should also note that, under NHS requirements, the Hospital is required to undertake a final NEAT assessment of the building **after completion** to demonstrate that the design objectives have actually been met in practice.

We recognise that we are restricted in achieving higher scores in some of the assessment categories because of our location, restricted height of the development due to the viewing corridors and the nature of our 'business'. We are an inner city development with little or no opportunity to develop true renewable energy sources although we are committed to the Phase 2 CHP. We have a very high proportion of children in intensive care where HEPA filtered mechanical ventilation in the only option available.

Whilst this planning application will be for a relatively small part of the Hospital campus only, Great Ormond Street Hospital remains committed to achieve an 'excellent' overall NEAT rating on Phase 2 and all subsequent development phases.

We would appreciate your confirmation that this letter and the commitments given herein satisfy the requirements set out in your pre-application report.

Yours Sincerely

William McGill
Director of Redevelopment

Cc: Mark Furlonger, LDY
Paul West, GTMS

NEAT Assessment for Great Ormond Street Hospital - 06 Dec 2006

Prepared for: Philip Day

14 Dec 2006

Client report number 230-327

Prepared by

Name Chris Hall

Position Senior Consultant

Signature

Approved on behalf of BRE

Name Davis Blake

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Date 14 Dec 06

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Executive Summary

BRE was asked to undertake an independent NEAT assessment of the emerging design for Great Ormond Street Hospital (GOSH) Phase 2 project at stage C and D. This report covers the Stage D review which was carried out in early December 2006. The assessment was based on responses and information provided by the Trust and Trust's appointed design team. At stage D the assessment was evidence based where evidence existed. The result of the assessment is shown in the table below. Green highlights that which is likely to be achieved or has been achieved and is broadly evidence based. The orange score represents an aggregate of the green score plus verbal commitments to achieving credits if it is too early in the project to have the necessary evidence for a credit to be awarded. This represents our assessment of the likely NEAT outcome for the Phase 2 development at GOSH. The last column represents the maximum possible score that could be achieved if the design were to be changed which in our opinion is unlikely.

	Weighting %	Stage D					
		Likely score on 6th Dec 06	Weighted score	Score if information provided and conveyed verbally was provided by project completion	Weighted score	Possible maximum score available to project if design was changed	Weighted score
Management	15	9%	1.36	91%	13.64	100%	15.00
Energy	15	12%	1.79	83%	12.50	98%	14.64
Transport	10	91%	9.09	100%	10.00	100%	10.00
Water	5	56%	2.78	67%	3.33	78%	3.89
Materials	5	38%	1.92	46%	2.31	62%	3.08
Landuse & Ecology	10	60%	6.00	60%	6.00	70%	7.00
Internal Environment	15	42%	6.25	50%	7.50	83%	12.50
Pollution	10	41%	4.12	82%	8.24	88%	8.82
Social	10	67%	6.67	100%	10.00	100%	10.00

Operational Waste	5	0%	0.00	75%	3.75	100%	5.00
			39.98		**77.26**		**89.93**

	%	Rating
	0	Fail
more than	25	Pass
more than	40	Good
more than	55	Very Good
more than	70	Excellent

The results shown in the orange column indicate that the project is in line to achieve an excellent NEAT rating. Looking at the green column it also indicates that in particular there is an energy design risk if verbal commitments are not delivered and an environmental management risk if the trust does not implement its management commitments.

In our experience when NEAT assessments are undertaken on completed buildings that scoring is consistently lower than aspirational NEAT scores taken before the design in fully worked up.

Overall we are encouraged by the GOSH phase 2 development team's approach to sustainability on this project. However, some of the hard evidence in meeting verbal commitments will require addressing if the excellent rating is to be delivered on completion.

Background

Great Ormond Street Hospital site is undergoing a phased re-development in central London. Currently Phase 2A and 2B are being designed and will have floor areas of approximately 18,000m^2 (new build) and 12,500m^2 (part new build and part refurbishment).

A NHS Environmental Assessment Tool (NEAT) "excellent" rating is a Department of Health's mandatory requirement for new buildings and a business case approval requirement. The local planning authority to Great Ormond Street Hospital has also requested that this is a requirement for planning approval in Lieu of a BREEAM assessment being carried out.

To ensure that a NEAT excellent rating is achieved at Phase 2 building completion it is useful to audit the NEAT rating at key procurement stages whilst there is still the opportunity to influence the final rating. BRE were asked to independently undertake the assessment on behalf of the trust at stages C and D.

At stage C, Outline Design stage in May 2006 BRE undertook an interim NEAT review which indicated that it was likely that an excellent rating could be achieved on completion. This was based a briefing meeting with the key design stakeholders. The review was mainly based on verbal information and intentions.

BRE produced a NEAT spread sheet which captured comments and key design issues from that design review. This can be used as an environmental performance benchmark against which all relevant ongoing design issues can be compared. This spread sheet, attached as Appendix A. This includes comments at stage C and D providing an audit of commitments, information that was requested, information provided and our comments.

Outline of NEAT assessment process and conclusions

BRE's assessment was based on verbal information received at a meeting on 1 November with the trust's design team and hard supportive evidence provided later. The actual assessment was undertaken at the beginning of December 2006 based on the information received.

To award a credit or pass comment BRE has reviewed the references provided and assessed whether the information has met the credit requirements. Our assessment of each credit is included in the spreadsheet is attached as Appendix A to this report. The spreadsheet includes a comments column to indicate areas for further work or why a credit has or has not been awarded. This process provides an evidence based audit trail for each of the credits awarded and a clear indication of the credits which are likely to be achieved as demonstrated by the evidence provided. Our assessment is therefore a judgement based on both evidence and assurances give that evidence will be available for re-assessment later on in the design process

In the spreadsheet we have coloured the credit markings to assist the trust identify weaknesses and strengths. Where information, that in our opinion, should have been available or where the reference did not provide the information verbally given we have highlighted the credit with yellow. A pass or likely pass at this stage is highlighted in green. Red indicates which credits are unlikely to be achieved. Orange indicates further work or design is required to achieve the credit.

Currently GOSH has achieved around 40% (green). Assuming all the information in yellow can be provided our best estimate of the likely score outcome will be around 77% at completion which would give an excellent rating. However, to achieve that score all the information requested on the attached spread sheet would need to be provided and all the yellow and most of the orange would need to become green. Currently there is scope to make small design changes which would further enhance the trust's likely NEAT score. By the end of Stage F these opportunities should have been realised or discounted. In reality few of the design changes are likely to be actually achieved. The main benefit of this column is to highlight credits which could possibly be achieved if an excellent rating becomes at risk subsequently.

Credits have been awarded where firm commitments have been made in the documentation submitted to BRE along with relevant information, which demonstrate compliance with the credit requirements. A failure to meet these commitments during later design stages would result in credits being withheld and if the information anticipated did not materialise before stage F could rob the project of an excellent rating.

Currently the energy and management related submission is weak. For energy we would expect key assumptions fundamental to achieving the energy targets to have been included and these to be driving the design and pushing integrated solutions. The documentation provided suggests a piecemeal approach which potentially is a project risk. Likewise we would have expected supportive information on the implementation of the environmental management process suggesting the trust is not fully committed to a sustainable outcome.

In our experience when NEAT assessments are undertaken on completed buildings the scoring is consistently lower than aspiration NEAT scores taken before the design is fully worked up. BRE's scoring provides a baseline against which the performance of the project can be compared. We recommend the Trust regularly undertakes an audit of the NEAT

performance of the ongoing design to ensure the completed Phase 2 buildings actually achieve an excellent rating upon completion.

Appendix A – Great Ormond Street NEAT stage D assessment spread sheet is attached as a separate attachment

Where a credit has been achieved enter a 1 in column D adjacent to the relevant yes/no question. In the row beneath each yes/no question the validation text will be required before the credit can be awarded in the actual assessment.				Likelihood of credit being achieved 1= yes	Responsibility	Actions	Comments by GOSH and Client Advisors at Stage C early design stage	Information required	Stage D NEAT assessment comments (Planning stage)
Management					**Overall Responsibility for section on Management: Trust**				
Man 2.1	**Post Construction Review**	One credit will be awarded for committing to complete a post construction review using NEAT.	Is there a firm commitment to complete a post construction review using NEAT?	1	Trust		A firm commitment has been given to carry out a post construction review using NEAT as part of the overall post project evaluation.	The design team must provide a letter of appointment of the independent reviewer which specifically mentions the responsibility for carrying out the Post Construction Review.	This commitment is detailed in the project management section of the business case.
			What is the name of the person co-ordinating the assessment?				A budget will be put aside by the Trust and responsibility for undertaking the assessment will be assigned. William McGill (Trust) will be responsible for ensuring this is carried out.	If a letter of appointment is not available then a commitment to the process must be demonstrated by the design team. This could be by way of a clause in the specifications committing to the requirement.	
Man 2.2	**Commitment to Carry out NEAT (existing) assessment**	One credit will be awarded for committing to complete the whole of this tool as a means of estimating and understanding the environmental impacts of the building in operation. This should be done one year after completion of the construction phase.	Is there a firm commitment to complete an environmental assessment using NEAT?	1	GTMS/ Trust		A firm commitment has been given to carry out a NEAT assessment throughout the redevelopment and one year after the construction process.	A specification clause must be provided which sets out the requirement to carry out an environmental assessment of the building in operation.	The Trust will be putting this committment in the business case as an appendix.
			What is the name of the person co-ordinating the completion of the tool?				The project manager at GTMS will ensure this is carried out.	If NEAT(existing) is to be used then no further information would be required. However, if an alternative assessment methodology is to be used then the list of criteria to be assessed and a description of the methodology must be provided.	
Man 2.3	**Environmental policy**	One credit will be awarded where there is an established and openly available published company policy on the environment at an organisational level. Guidance on compiling an environmental policy can be found in Good Practice Guide 200 "A strategic approach to environmental management" is available free through the Energy Efficiency Best Practice Programme.	Does the trust own an openly available published environmental policy that has been made available to the design team?		Trust	The policy is on the Trust website but requires updating urgently. Website address or existing policy to be provided by Peter Woolaston.	GOSH does have an existing environmental policy but this requires updating.	Does/will the trust have an openly available published environmental policy that has been made available to the design team? What will the publication be titled? How will th environmental policy be made available? Who will responsible for ensuring that the environmental policy is implemented at the building level? Which aspects of the design have been influenced by the trusts environmental policy? Which of the following is the policy likely to cover? · The use of timber from sustainably managed sources. This could include FSC (or other equivalent) certification as per the timber credit.	The environmental policy has yet to be updated and circulated to the design team. There needs to be an implementation strategy with targets and a review process associated with the updated policy that informs the redevelopment of Phase 2a and 2b.
		http://www.energy-efficiency.gov.uk/info/pubs/detr3/frames/index_2.cfm	What is the name of the publication and how is it made available?				The policy is available on the GOSH website but needs updating by the Environment Manager at GOSH.	· The use of paints which contain organic solvents. · The use of energy and water efficient equipment. · A considered approach to the supply of energy – this does not require the use of a renewable energy source, but should demonstrate consideration of environmental impact in such decisions. · The use of paper which has a significant (i.e. over 30%) recycled content and which is chlorine free. · The use of biodegradable cleaning materials. · The use of recyclable/ recycled printer cartridges. · Adoption of the overall principles of credits Man 7 and Man 6 in all supply contracts for materials and services. · Avoidance of paints containing lead. Avoidance of Asbestos. · Avoidance of all insulation materials, packaging, drinks and food containers which contain ozone depleting substances including CFCs and HCFCs in their composition and/ or manufacture.	
Man 2.4	**Minimising construction nuisance**	One credit will be awarded where the considerate constructors scheme will be used and when a minimum of 3 points is achieved in each category	Will the Considerate Constructors scheme be used and a minimum score of 3 achieved?	1	GTMS		The PQQ will include a requirement to register with the Considerate Constructors Scheme and score at least 3 under each category. Higher achievement levels could be set (the maximum score for each section is 5, there are 8 sections: Considerate, Environmentally Aware, Cleanliness, A Good Neighbour, Respectful, Safe, Responsible, Accountable). The Trust may want to set mandatory levels for dust, noise and vibration.	The design team must provide confirmation that the construction site management practices will meet the standards required to comply with the Considerate Constructors Scheme. i.e. that a minimum score of 3 in every section will be achieved.	This will be included in the enabling works and main redevelopment PQQ - the PQQs are not in existence yet but are to be written early next year. GTMS to ensure this is included.

		The Considerate Constructors Scheme is a national initiative, designed to improve the image of construction through better management and presentation of its sites. It aims to raise the standards of construction design and management above statutory requirements. Details can be obtained from www.ccscheme.org.uk or enquiries@considerateconstructorsscheme.org.uk or Tel 01920 872837.	Who is responsible for ensuring compliance with the Considerate Constructors Scheme?				GTMS project manager responsible for checking compliance and ensuring requirement is included in documentation.		
Man 2.5	**Commissioning time and budget**	One credit will be awarded where time and budgets for commissioning are made on project programmes and cost plans prior to occupation. Document or file reference number required.	Have time and budgets been allowed for commissioning?	1	GTMS, WSP, Trust		There will be two different types of commissioning. The Trust will expect to see bespoke commissioning for the M&E plant. There will then be further commissioning for the remaining parts of the hospital The Trust will aim to not allow construction to creep into the commissioning time. The Trust will set allocate time and a budget for commissioning.	The design team must provide a project programme showing that an adequate period and budget is allowed for commissioning. At least two weeks should be allocated for commissioning where buildings contain complex servicing systems. Where complex services systems are not present in the building / unit (i.e. naturally ventilated, domestic scale installation), this period can be reduced to a minimum of 1 week.	GTMS hve a master programme for the construction which allows 12 weeks for hospital commissionining . There is also a commissioning period for M&E contractors set aside. GTMS to provide master programme. WSP stated that atl least 3 months should be allowed for commissioning.
		Commissioning is a vital stage of most construction projects in ensuring that the building services and fabric operates as intended by the design team i.e. in an efficient and effective way. A poorly commissioned building can consume significantly more resources and is likely to provide a significantly poorer indoor environment than one which is properly commissioned. In many projects commissioning becomes squeezed as a result of a lack of clear responsibilities and NEAT seeks to ensure that such responsibilities are present. Whilst rarely in a position to control commissioning work, Design team professionals are in an ideal position to witness it and give feedback on its relevance, robustness and effectiveness as	What are the reference numbers of the documents or files in which these are shown?				GTMS project manager, WSP and the Trust (Estates and Facilities) to be responsible for setting out commissioning requirements out in documentation.		
Man 2.6	**Commissioning responsibilities**	One credit will be awarded where the design team can demonstrate that one or more design team members have been expressly appointed to monitor commissioning on behalf of the client.	Is there a member of the design team responsible for monitoring commissioning?	1	Trust		The Trust will appoint an independent specialist commissioning engineer.	The design team must be committed to the inclusion of the relevant clauses in the construction contract documentation, mentioning specifically BSRIA and/or CIBSE guidelines for commissioning.	Same comments apply as previous credit - documents not in existence yet. Dedicated commissioning contractor will be appointed possibly WSP. It is the Trust's Estates and Facilities and Redevelopment team responsiblity for making this happen.
		The assessor should ask the design team to provide copies of the letters of appointment to design team members specifically mentioning responsibility for commissioning. The assessor will be required to check relevant correspondence provided to ensure that a specific member of the design team will be overseeing the commissioning process.	Which member(s) of the design team is/are responsible for monitoring commissioning?				The Trust (Estates and Facilities) will ensure that this will is done at the appropriate stage.		
Man 2.7	**Commissioning agent**	One credit will be awarded where the design team can demonstrate the appointment of an independent specialist commissioning agent by either the client or the contractor for building services equipment.	Has a specialist commissioning agent been appointed?	1	Trust		The Trust will appoint an independent specialist commissioning engineer.	The design team will be required to provide written commitment to appoint such an agent and the scope of their remit together with the details of the responsibilities of that agent.	As previous credit to be done by Stage F.
		The assessor should ask the design team to provide copies of the written confirmation of the appointment of a commissioning agent and the responsibilities of that agent. Written confirmation from client or contractor that a commissioning agent will be appointed at the appropriate time The assessor will be required to check that relevant correspondence is provided for the following: Letters of appointment of a commissioning agent. OR if the tender has not yet been let, or an agent selected, written commitment to appoint such an agent. The commissioning agent could be a person from within the contractor or sub-contractor organisation, as long as they are not involved in the general installation works.	Either provide brief details of the main responsibilities of the specialist commissioning agent or the name of the agent.				The Trust (Estates and Facilities) will ensure that this will is done at the appropriate stage.		
Man 2.8	**Commissioning clauses**	One credit will be awarded where there are contractual clauses that ensure that the following responsibilities are passed onto the contractor and all trades on site: - pre-commissioning; - seasonal commissioning - commissioning - quality monitoring	Are clauses relating to pre-commissioning and quality monitoring included in the specifications?	1	LDY, WSP, GTMS		Appropriate commissioning clauses (including pre-commissioning and quality monitoring) will be written into the contract.	The design team will need to provide a letter of the design team member/s responsible for commissioning. This must set out the roles / responsibilities of the monitor overseeing commissioning.	WSP will include workmanship clauses in the M&E specification. WSP to send draft copy of clauses.
			What are the reference numbers of the relevant clauses?				LDY, WSP to include appropriate commissioning clauses in the M&E specification and main contract. GTMS to check specification.		

Man 2.9	**Simple building users guide**	One credit will be awarded where there is a simple guide for users of the building that covers the main building services elements. The guide must be aimed at the users of the building to enable them to understand the intended operational modes of the building.	Is a simple users guide provided, which covers design parameters of the main building services items?	1	Trust, LDY, WSP		A simple building users guide will be produced by the Trust and their advisors. A log book (as required by the building regs) will be produced by the developer and this will be used to develop the building users guide. LDY and WSP to input to simple building users guide and work with Estates to put into usable version for building users. Estates will issue the building users guide to the building users.	The design team must provide a list of contents for the simple users guide and confirm that this guide will be pitched at a level which will allow all building users to understand the basic principals of the building.	Trust committed to in previous assessment. Trust to include the budget for WSP and LDY to write the manuals. Trust to ensure adequate training for users and provision of manual to users.
		Aimed at management personnel who make facilities management decisions (such as increasing number of beds in rooms etc) rather than technical facilities managers. The aim of the credit is to ensure that design features are used efficiently and that changes to operational areas are managed in the most appropriate manner. NOTE: The presence of a building O&M (Operations and Maintenance Manual) does not meet this requirement. The latter is usually a requirement and provides the detailed specialist information required by technical FM and maintenance staff / contractors	What are the reference numbers of the documents or files in which these are shown?					1. Energy & environmental strategy 2. Building services - For each system an explanation of how each system operates; a list of likely signs of system failure or inefficient operation, subsequent dangers to staff and patient well being, and some “do’s and don’ts”. The following systems should be covered where present; a. Ventilation b. Heating system c. Cooling system d. Electrical systems e. Lighting f. Water use and drainage 3. Transport facilities 4. Materials & waste policy 5. Expansion/Re-fit considerations 6. Links, references and contact details	
Man 2.10	**Environmental impact of supply chain**	One credit will be awarded where there is encouragement of manufacturers, suppliers and contractors through contract specifications to develop environmentally preferable goods and services at competitive prices as outlined in Procure21. One way of achieving this is to assess the environmental performance of potential suppliers .	Are contract specifications in place to ensure that manufacturers, suppliers and contractors assess the environmental impacts of their goods and services?		Trust, GTMS	Trust to update green procurement policy and provide to other client advisors.	The Trust's current green procurement policy needs updating. This needs to be done so that this can be issued as part of tender documents. As part of the pre-qualification process the developer will be required to have an EMS system. LDY have a green procurement and specification system. Tender documents will ask developers for their green procurement policy in tender process. GTMS will be responsible for checking green procurement issues.	The design team must provide contract specifications which ensure that manufacturers, suppliers and contractors assess the environmental impacts of their goods and services.	The credit is the Trust's responsibility and a green procurement policy will go into the PQQ. The PQQ is due to go out in Jan/ Feb /March next year. This must be followed through in the contract itself and monitored by the Trust.
		ProCure 21 (capital development procurement process) published by NHS Estates	In which document or file can examples be found?						
Man 2.11	**Asset maintenance agreement**	One credit will be awarded where provision is made for an asset maintenance agreement. Guidance on asset maintenance agreements can be found in Estatecode – Asset Maintenance, published by NHS Estates.	Is there an asset maintenance agreement?	1	Trust		There is an in-house maintenance budget for theTrust and this complies with NHS guidance. Estates and facilities to ensure compliance.	Will there be an asset maintenance agreement? What systems / plant will this cover? Who will carry out the tasks required under the asset maintenance plan?	Thi s included In the business case . The Trust have just taken on a new employee to ensure estates maintenance happens. Fraser McCardell is the person employed by the Trust to carry out this task. Assest mainteance covers all systems and plant.
			Where is this documented?				.		
			Management Score	**82%**					
Energy					Overall responsibility for section: M&E				
E 2.1	**Energy submetering (plant)**	One credit will be awarded where there is sub metering of major energy uses in the unit covering each of the following (where present): - humidification plant - cooling plant and fans - computer room - lighting and small power	Does sub metering in the unit cover each of the major energy uses such as cooling and fans etc?	1	WSP, Trust		Energy sub metering will be in accordance with Part L, linked to the BEMS and the Monitoring & Target system.	Will direct sub-meters be provided on all the systems listed above and will they be linked to an automatic meter reading system to monitor energy consumption of major items of all plant and systems? How will the sub-metering be carried out? How will the sub-metering be used to mange energy use though out the building What is the drawing reference of the plan showing the location of the sub-meters?	Credit comments the same as before. Metering to departmental level currently. The meters will be registered on the BEMS and provide a report on energy usage as part of BEMS system. Report management system. Stage D report has commitment for energy management system. Exact system will not be specified until detail design stage.
			Which items are covered by sub meters?				All major items of mechanical plant, heat meters and departmental levels will be covered by meters. The Trust does need to decide about how far they want to go with metering and if it is automatically linked and tracked by the BEMS. Estates will be responsible for deciding submetering requirements.		The Trust hasn't decided positions of energy meters in full detail yet but this willl be done once the system is designed. Andrew Galloway responsible for the Trust for this.Trust need to put together with WSP a strategy for how the sub metering will be used to manage the energy use throughout the building. There needs to be a budget in the business case to cover the cost of connecting the sub meters to an automatic meter reading system.

E 2.2	**Energy submetering (departmental)**	One credit will be awarded where there is sub metering of major energy uses by departments in the unit, covering each of the following (where present): - Theatre Rooms - Scanning Department (X-ray, MRI, etc) - Computer room; - Catering; - Laundry	Does sub metering in the unit cover each of the major energy use departments?	1	WSP, Trust		All will major energy uses by department will be sub metered. The Trust (Estates) will be responsible for ensuring this is included.	Will direct sub-meters be provided which allow direct sub-metering of all the departments listed above that are present in the building to be assessed. Which departments are sub-metered? How will the sub-metering be carried out? Will the meters be linked to an automatic meter reading system to monitor energy consumption by end use and be suitable for providing departmental billing? What is the drawing reference of the plan showing the location of sub-meters?	Credit comments the same as before. Metering to departmental level currently. The meters will be registered on the BEMS and provide a report on energy usage as part of BEMS system. Report management system. Stage D report has commitment for energy management system. Exact system will not be specified until detail design stage.
			Which functions are covered by sub meters?						The Trust hasn't decided positions of energy meters in full detail yet but this willl be done once the system is designed. Andrew Galloway responsible for the Trust for this.Trust need to put together with WSP a strategy for how the sub metering will be used to manage the energy use throughout the building. There needs to be a budget in the business case to cover the cost of connecting the sub meters to an automatic meter reading system. The credit requires a list of all departments to be submetered and a strategy to show how the submeters will be used to provide departmental energy use.
E 2.3	**Electrical check metering**	One credit will be awarded where electrical check-metering of tenancy areas is installed (in multi-occupant cases only) or where the unit is, and is likely to remain, single tenancy for the next five years.	Is the unit single tenancy? OR, If there are any tenancy areas, is electrical check-metering installed ?	1	Trust		Not applicable as there will be no tenants.	Not applicable	N/A
			Which tenancy areas are fitted with electrical check-meters, or if the unit is single tenancy, what is the name of the occupying organisation?						
E 2.4	**Heating system zones**	One credit will be awarded where the heating system is separated into zones so that areas of the unit with different heating requirements can be controlled separately.	Is the heating system separated into zones so that areas of the unit with different heating requirements can be controlled separately?	1	WSP		The building will be split up into different heating zones. WSP are responsible for splitting the building into appropriate heating zones further on in the design process.	Is the heating system separated into zones so that areas of the unit with different heating requirements, occupancy, heat gains and losses can be controlled separately? How is the required level of zoning and control achieved in each zone? What is the reference of drawings which identify the locations of heating zones showing heat emitters and their controls?	WSP have done schematics for heating zones. Draft of rationale behind it to be provided by WSP. Both bulildings are east west orientated so will have similar strategies.
			How is the required level of zoning and control achieved?						
E 2.5	**Local Heating Controls**	One credit will be awarded where TRVs or equivalent are installed.	Are TRVs (thermostatic radiator valves) or equivalent installed to allow occupants local control over heating?	1	WSP		An equivalent to TRV's will be installed (electronic controls 2 port). (Zoning needs to be carefully though through).	The design team must provide details of the controls to be used. This must include both a description of how the system works as well as diagram/s showing locations of controls.	Stage D report to state intent of control strategy.
			Please state the type of controls installed? (e.g. TRVs)						
E 2.6	**Heating system selection**	One credit will be awarded where the heating system is designed to meet seasonal variations in demand in an efficient way. An example of a system that satisfies these criteria is a modular boiler system. A modular boiler system makes use of different sizes of plant depending on the output requirement as this will change with the seasons.	Is the heating system designed to be able to meet seasonal variations in demand?	1	WSP		The building will have a multi-boiler installation and major heat reclaim. The building will hold the primary plant for the site. The building will respond to seasonal variations. WSP are responsible for ensuring the design meets this credit.	The design team must provide details of the heating systems to be installed and an explanation of how it adapts to differing loads during different times of the year.	Rational is for centralised boiler plant decentralised across the site. DHW is centralised. Optimum energy performance has been used for deciding final system. The objective for the entire site is that there are a number of heat loops which allow excess heat from one building to be used in another building.
			What type of system is installed?				Check at next design stage for further details. The effectiveness of the heating system is dependent on the effectiveness of the controls. The baseline energy consumption in Table A-3 WSP report Energy and Renewable Strategy seems high if this credit is to be achieved and may mean the NHS energy target is not met.		WSP have assessed plant against load and have tried to match particular boiler size to a particular load at any time of the year. To acheve the credit WSP need to provide their strategy to demonstrate how the plant has been selected and how it adapts to seasonal loads energy efficiently. The strategy needs to demonstrate that account has been taken of energy recovery.

E 2.7	**High Efficacy Internal Lighting**	One credit where internal lighting is designed in accordance with the NHS Estates guidance "Achieving Energy Efficiency in the NHS"	Is internal lighting designed in accordance with NHS guidance?	1	WSP		High frequency fluorescent tubes will be used and lighting will be designed to meet ENCODE and NHS guidance.	Is internal lighting designed in accordance with guidance above guidance? What type of luminaires are specified? What is the Output ratio of luminaires and circuit efficacy in lumens/ w ? What lamps are specified and what is their colour temperatures and colour render? What is the reference of the document which sets out the type of fittings and lamps specified?	No detailed calculations on lighting at this stage. WSP must comply with Appendix 5 of ENCODE which states that lighting energy targets are less than : 3 W/m2 for 100 lux, 5-6 W/m2 for 200 lux, 7-8 W/m2 for 300 lux.
			What luminaires are specified?				Further details to be given as design progresses. The lighting specification needs to comply with Appendix 5 of ENCODE, the lighting energy consumption figure in WSP report Energy and Renewable Strategy Table A-3 seems quite low.		
E 2.8	**Lighting control**	One credit will be awarded where improved lighting controls are installed or specified. Examples of improved lighting control include: - time controls for areas with regular patterns of use; - time controls or daylight correction controls for external lighting; - presence detection controls; - daytime detection controls.	Are improved lighting controls installed or specified? See guidance for more details.	1	WSP		Wherever possible lighting controls will be used. Store and plant rooms will use presence detection. Daylight detection controls will be used in some areas where there is daylighting. WSP to ensure design meets this credit.	Are improved lighting controls installed or specified? What type of lighting controls are specified? How will the controls operate and how appropriate are they for each area? What are the references of the data sheets / documents / specifications which give details of the lighting controls and how the lighting will be used in each area?	WSP suggesting put in a card into a reader for plant rooms instead of daylight detection. Rationale hasn't been developed yet will go hand in hand with clinical planning issues. Principles of design directory which would give parameters. The principles of design must meet the requirements of Appendix 5 ENCODE specifically the lighting control should ensure that the lighting consumption should be less than 20 kwh hrs/m2 per annum.
			What type of lighting controls are specified?				Further details to be given as design progresses. The lighting controls should enable lighting only when necessary to maintain minimum lighting levels. (See CIBSE code for interior lighting 2004). A calculation for each area needs to be done.		
E 2.9	**High efficacy external lighting**	One credit will be awarded where external lighting and outbuilding lighting has an efficacy of 50 lumens/Watt or more. Examples of light fittings that generally satisfy this are: - high and low pressure sodium - metal halide - induction lighting - tubular and compact fluorescent	Does the external lighting system have an efficacy of 50 Lumens/Watt or more?		WSP		WSP need to consult with the local authority to check their requirements (in relation to security issues) and also consider efficiency issues.	Does the external lighting system have an efficacy of 50 Lumens/Watt or more? What type of light fittings have been specified? What is the reference of the report/drawing/data sheet which contains details of the light fittings specified?	WSP and LDY are working on strategy for external lighting. Luminaires shall have a sharp cut off and only illuminate the area specified.
			What is the type of light fitting used?				Further details to be given as design progresses.		
E 2.10	**Security lighting controls**	One credit will be awarded where external security lighting is controlled for absence and daylight. Absence detection and daylight linking (through a timeswitch or a daylight sensor) will ensure that the lights are only on when necessary.	Is external security lighting controlled for absence and daylight?	1	WSP	Trust to discuss Secure by Design status with the Police.	Trust may think about Secure by Design status for the building. WSP will ensure that security lighting is specified with absence and daylight sensors. Estates to discuss Secure by Design issues with the police.	Is external security lighting controlled for absence and daylight? How is the required level of control achieved? Please provide justification for the specification of security lighting which has proximity control only. What is the reference of the data sheets / drawings where the types of controls are specified?	The Trust is going for Secure by Design Status. WSP to provide written commitment to comply with credit requirements.
		Manual control is NOT acceptable	How is the required level of control achieved?				Further details to be given as design progresses.		
E 2.11	**Thermal insulation 1**	One credit will be awarded where the overall U value of the unit shows a 5% or greater improvement in U value compared to current Building Regulation requirements.	Is the overall U value at least 5% better than current Building Regulation Part L?	1	WSP, LDY	WSP to model the building and confirm percentage above building regulation U value.	WSP will be modelling the building. WSP need to check the economics of improved insulation levels. The building is about to be modelled so further information will be provided following the modelling. WSP hope to achieve a 5% improvement in the U value compared to the building regulations.	The design team must provide details of the U-values of each external building element. Calculations must also be provided which demonstrate the improvement over building regulations. The 2006 revisions to L2 require an assessment using SBEM.	WSP have now modelled building. Have added more insulation in the walls and now building complies. WSP to see if they can calculate the overall U value.
			Give U-value					What is the average U-Value for the walls, roof floor and windows? What is the reference of the document where the calculations demonstrating the average U-value are shown? How did the building perform using SBEM what were the default information used in the calculation What is the reference of the document / drawing or data sheet which sets out the UValues of each of the exterior building elements?	
E 2.12	**Thermal insulation 2**	One credit will be awarded where the overall U value of the unit shows a 15% or greater improvement in U value compared to current Building Regulation requirements.	Is the overall U value at least 15% better than current Building Regulation Part L?		WSP, LDY		See credit E 2.11		As credit above
			Give U-value						
E 2.13	**Thermal insulation 3**	One credit will be awarded where the overall U value of the unit shows a 25% or greater improvement in U value compared to current Building Regulation requirements.	Is the overall U value at least 25% better than current Building Regulation Part L?		WSP, LDY		See credit E 2.11		As credit above
			Give U-value						

E 2.14	**Net CO_2 emissions**	This range of credits has been developed using BRECSU, NHS Estates (ERIC) research and others. It is based on CO_2 emissions associated with operational energy use of the site(s). It uses the latest CO_2 conversion factors to relate operational energy use to primary energy. In order to achieve the maximum number of credits, the site must be carbon neutral.	**The number of credits achieved from a maximum of 20 calculated (see sheet 2). Information required will be the energy consumption of each fuel source i.e. coal, gas, electricity imported steam etc**	4	WSP		WSP are modelling the building but this has not been completed yet. WSP are aiming to meet the 55GJ/ 100m3 target. WSP has produced a report which gives predicted energy usage for the building. The modelling is being used as a design tool.	The design team must provide calculations showing the predicted energy consumption of the proposed development. This should be broken down into each fuel type in order to allow the resulting CO2 emissions to be calculated. The amount of electricity generated by renewable energy generation, all electricity exported from the site and all heat generated as a by-product must be provided.	WSP calculations show 40 GJ as predicted energy usage. WSP to provide calculations to demonstrate predicted energy usage and assumptions behind them.
		If the NHS Energy Target, of 35 to 55 GJ/100m^3 is achieved, assuming an average ceiling height of 3m, between 4 and 13 credits will be awarded.	***If no data has been entered, then a score of zero will be given.***				The baseline carbon emissions in Table 3-A of WSP report Energy and Renewable Strategy need to be looked at. There seems to be discrepancies between the ratio of carbon emission for gas and electrical use. Also the ratio for electrical consumption to gas consumption seems very low. The current figures exceed the NHS energy target by almost 1 GJ, electrical use seems on the low side. If the electrical use figures were higher then the building would not meet the NHS energy target.	What is the predicted gross energy consumption of the building, for each fuel type, per square meter? What assumptions were made If the boilers are dual fuel what is the predicted split e.g. 60:40, 50:50 etc? Will any renewable energy be generated onsite and, if so, what type of system will be used? How much energy(heat and electricity), generated onsite, is to be exported offsite?	
E 2.15	**Availability of drying spaces**	One credit will be awarded where accommodation includes the provision of spaces purpose designed for the drying of wet clothes.	If any residential type accommodation is included, are purpose designed drying spaces provided for drying wet clothes? If there is no residential accommodation, this credit does not apply	1	LDY		Not applicable as there are no residential units.	Not applicable	No information required
		This credit is ONLY relevant for residential accommodation. If no residential accommodation is present, you should answer the question NOT APPLICABLE (N/A) by clicking on the N/A button.	What type of drying facilities are provided?						
E 2.16	**Ecologically friendly appliances**	Credits will be awarded where appliances (where specified) have good Ecolabel ratings.	Do fridges, freezers and washing machines have Ecolabel ratings of A or B and washer dryers and dryers have ratings of C or better? If there is no residential accommodation, this credit does not apply	1	Trust	Trust to include specification of A rated appliances whereever possible in green procurement policy.	This credit does not apply as there are no residential units. However the Trust will specify A rated appliances wherever possible (or B rated for commercial dishwashers) where these are required. Trust need to include this requirement in the updated green procurement policy.	Not applicable	No information required
		This credit is ONLY relevant for residential accommodation. If no residential accommodation is present, you should answer the question NOT APPLICABLE (N/A) by clicking on the N/A button.	Which domestic appliances are specified and what are the Eco label ratings are specified?						
E 2.17	**Fan/Pump Speeds**	One credit will be awarded where variable speed controls are installed on fans and pumps, where appropriate.	Are variable speed controls installed on fans and pumps where appropriate?	1	WSP, Trust		The whole system is a variable volume system which has variable flow control which is to be modulated by motor variable speed drives. All pumps and other fans will have variable speed drives to enable motor output match building load under all conditions. WSP and Estates are responsible for achieving this credit.	Are variable speed controls installed on fans and pumps? What are the criteria used for assessing the need for VSD's? What are the references of the drawings / documents / data sheets which give details of the VSD's installed?	This will be Written in the Stage D report - draft report for strategy.
			What are the criteria for deciding where VSDs will be installed?						
E 2.18	**Air conditioning measures**	One credit will be awarded where "free cooling" is used and air conditioning is avoided wherever possible. This excludes those areas where air-conditioning is required for clinical purposes.	Do air conditioning systems make use of outside air for "free cooling" where appropriate? If no air conditioning is present, enter "1"		WSP		All air handing plant is 100% fresh air and uses fresh air wherever possible (this does not meet the free cooling requirement of the credit). WSP are looking at using ground water for cooling and may put in a bore hole on site. WSP need to check with the Environment Agency about a licence for a bore hole with 30 metre deep piles. There may need to be four boreholes sunk and then these are alternated and flushed out. WSP are not looking at direct extraction but thermal piles. WSP are also looking at chilled beam solutions and options are being evaluated to reduce the load on the chillers.	The design team must provide information on the rooms which will be air conditioned and the NHS guidance which states the requirement for air conditioning. The design team must also provide details of the systems which have been installed to take advantage of "free cooling" i.e. outside air, ground water, etc. Is free cooling used? What method of "free cooling" is being used? Where is free cooling being used? What are the references of the drawings / documents / data sheets which give details of the "free cooling" installed?	They are using a closed bore hole system. The GLA report shows what measures have been considered and what strategy they are going forward with. WSP will be describing system in the Stage D report. Report needs to demonstrate that when the external temperature is below 18 degrees then no mechanical cooling is required.
			Where is free cooling used?				Can the chillers be bypassed to make use of free cooling (strainer cycle)?		

E 2.19	**Combined Heat and Power (CHP)**	One credit will be awarded where a CHP feasibility study has been undertaken. CHP Sizing and Feasibility software for hospitals can be obtained free of charge from Environment and Energy Helpline (Tel 0800 585794).	Has a feasibility study of CHP been carried out?	1	WSP		A CHP feasibility study has been carried out.	The design team must provide details of the feasibility study undertaken, including the payback period and whether or not CHP is to be installed.	As comments before.
			In which document or file are the results of the feasibility study recorded?				WSP have a copy of this report.		
E 2.20	**Energy efficient boilers**	One credit will be awarded where energy efficient heating plant is specified. The plant should have an operating efficiency of at least 85%.	Does the heat generating system have an operating efficiency of 85% or greater?	1	WSP		Multi condensing boilers are to be used. The return water temperatures will allow for condensing under most load conditions. These have around 90% efficiency.	What type of heat generation will be specified, i.e. boiler, electric storage, etc? What is the make and model of the heat generation system specified? What is the heat generation systems gross efficiency? What fuel is used by the heating plant?	Evidence to be provided in the Stage D report. Phase 2 will be based on a low temperature hot water system supplied by the medium temperature hot water distribution system.
			What type and make of heat generation is installed?				Further details to be given as design progresses.		
E 2.21	**Building Energy Management Systems (BEMS)**	One credit will be awarded where a computerised BEMS is installed. Appropriate levels of staff training of its operation should be provided to ensure the best performance.	Is a computerised BEMS installed?	1	WSP, Trust		A BEMS is to be installed.	The design team must provide details of the BEMS and of the systems which it covers. Details of the training procedures and the people who will be trained in its use will also be required.	Stage D report contains information on BEMS - trend system - Martin Webb fromthe Trust to be trained in its use together with operational engineers.
			Who is responsible for training in and operation of the BEMS?				Estates and facilities will be responsible for training and operating the BEMS once installed.		
E 2.22	**Heat recovery**	One credit will be awarded where heat recovery is used, where appropriate.	Is heat recovery used where appropriate?	1	WSP, LDY		Heat recovery will include: water to water, water to air, heat reclaim off chillers to be used. WSP are looking at methods of transfer of heat to air. Final specifications will be finalised when the modelling exercise is complete.	Is heat recovery used where appropriate? What types of heat recovery have been specified? Where have the each of the types of heat recovery, specified above, been installed? What are the references of the documents / drawings / data sheets giving details of heat recovery? What is the reference of the report which sets out the selection process?	Methods of heat recovery can be provided but WSP cannot give a % figure. Methods of heat recovery to be included in Stage D report.
			In which areas is heat recovery used and what methods are employed?				Further details to be given as design progresses. Locations of inlets and outlets needs to be carefully considered between the architect and engineer. Estimation of heat recovery % from ventilation air would be useful.		
E 2.23	**Humidity sensors**	One credit will be awarded where humidity sensors are installed in residential accommodation and laundry drying areas to control the use of air extract system	Are humidity sensors installed in drying areas? If there are no drying areas, this credit does not apply	1	WSP		Not applicable as there is no residential accommodation.	Not applicable.	Not appplicable
			What type and make of humidity sensors are installed or specified?						
			Energy total credits achieved	**62%**					
Transport					Overall responsibility: Trust				
T 2.1	**Transport Plan**	One credit will be awarded where a transport plan has been produced. This must make reference to NHS Transport Surveys, Plan and Targets.	Has a green transport plan been produced?	1	Trust		A green transport plan has been produced by the Trust and will be in line with the appropriate HTM. It is being updated at present. The green transport plan needs to be in line with the new HTM 07-03 Transport, Management and Car Parking.	The design team must provide a transport plan and details of its implications on the design. A transport plan should include the following, as a minimum: · Staff journeys · Travel undertaken by staff during the working day · Patients and visitors – travelling to and from site · Deliveries and/ or contractors · Ambulances	Green transport plan in place and action plan in place to implement this.
		http://www.local-transport.dtlr.gov.uk/travelplans/index.htm	Who is responsible for its implementation?				Estates and facilities are responsible for its implementation. The green transport plan needs to be in line with the new HTM 07-03 Transport, Management and Car Parking.		

T 2.2	**Controls Assurance Standard - Transport**	One credit will be awarded where there is compliance with NHS Estates Controls Assurance Standard best practice (a score of 100% must be achieved) with regard to transport. Further details can be obtained from NHS Estates.	Is there compliance with Controls Assurance Standard with regard to transport?	1	Trust		The last time the Control Assurance was reported was 18 months ago and the Trust were 100% compliant. Standards for better health now applies, and the Trust complies with the new standard.	Is there compliance with Controls Assurance Standards with regard to transport? Who is responsible for ensuring compliance? What is the reference of the document / correspondence confirming that the trust meets the requirements of Controls Assurance Standard – Transport?	
			Who is responsible for ensuring compliance?				Estates and facilities are responsible for ensuring compliance. Need to check new standards and how these relate to this credit.		
T 2.3	**Car parking**	One credit will be awarded when there is only 1 parking space for every 4 staff on duty. The number of staff on duty should be considered as the maximum number of staff onsite at any one time.	Is car parking provision restricted to 1 space for every 4 staff on duty?	1	Trust		Parking on site is very restricted due to the city centre location.	The design team must provide details of number of parking spaces and the maximum number of staff that will be onsite at peak occupancy periods.	80 parking spaces for 2500 staff on site therefore requirements of the credit are met.
			What is the actual number of car parking spaces?				The Trust have 110 parking sites on site for 2500 staff and therefore meet the requirement of the credit.		
T 2.4	**Cyclists facilities**	Adequate cycling facilities should mean provision for at least 10% of the on site staff. Provisions should include showers, changing rooms, sheltered cycle storage.	Are there adequate cycling facilities on site?		Trust, LDY		The credit requires bike storage for 10% of staff numbers. 65% of staff will be located in new buildings A and B.	What is the maximum number of staff at peak occupancy periods? How many sheltered cycle racks will be provided? How many lockers will be provided? Will showers and changing facilities be provided?	175 bike spaces planned included in FBC - central staff change showers - Trust (Ellie) to find out how many showers and any lockers.
			Storage for how many bicycles?				The Trust currently has space for 90 bikes and would require 162 spaces in total to meet the credit requirements for the new buildings. Review design to see where additional bikes could be stored.		
T 2.5	**Local public transport facilities**	One credit will be awarded where good access is available to public transport networks within 200m and with a 15 min. service frequency to local urban centre.	Is the site entrance less than 200m to the nearest public transport stop with a service every 15 minutes or less to a local urban centre at peak times?	1	Trust		Credit requirements are met due to city centre location.	The design team must provide timetables and maps showing locations of local transport stops (bus, tram, etc)	
			What is the nearest public transport stop providing this service and where is it located ?				Closest bus stops are in Theobalds Road and Southampton Row.		
T 2.6	**National public transport facilities**	One credit will be awarded where good access is available to public transport networks within 400m, with a 15 min. service frequency to a major public transport node. A transport node is a point at which it is possible to change mode of transport, or route i.e. bus/rail station etc	Is the site entrance less than 400m to the nearest public transport stop with a service every 15 minutes or less to a major public transport node at peak times?	1	Trust		See credit above	See credit above	
			What is the nearest public transport stop providing this service and where is it located ?				See credit above		
T 2.7	**Good amenity location**	One credit will be awarded where the site is within 500m of a grocery shop and post box. This will help reduce the use of the car for short journeys.	Is the site within 500m of grocery shop and post box?	1	Trust		Credit requirements are met due.	The design team must provide a list of the amenities located on or near to the site and a map showing the locations of those amenities.	There is a post box located inside the hospital and a grocery store in Lambs Conduit Street and Southhamption Row.
		Close proximity to amenities will ensure that staff are more likely to walk to them, this will reduce car use.	Where are they located?				There is a post box located inside the hospital and a grocery store in Lambs Conduit Street and Southhamption Row.		

T 2.8	**Very good amenity location**	One credit will be awarded where the site is within 1000m of 5 of the following amenities: - post office, - grocery shop, - bank, - pharmacy, - leisure centre, - community centre, - social facilities, - children's play area. - catering facility	Is the site is within 1000m of at least 5 of the amenities listed in the guidance?	1	Trust		See credit below.		
			Where are they located?						
T 2.9	**On site amenity provision**	One credit will be awarded where the site contains, or is within 200m of at least 5 of the following amenities : - post office, - grocery shop, - bank, - pharmacy, - leisure centre, - community centre, - children's play area. - catering facility	Does the site contain or is it within 200m of at least 5 of the amenities listed in the guidance?	1	Trust		All of the following amenities are within 200m of the site: Grocery shop, pharmacy, children's play area, bank and catering facility.		All of the following amenities are within 200m of the site: Grocery shop, pharmacy, children's play area, bank and catering facility.
			Which amenities are present?						
T 2.10	**Pedestrian safety**	One credit will be awarded where there are safe pedestrian routes to local amenities that are adequately lit but that avoid unsafe crossings of major traffic routes. Where major traffic routes are to be crossed, pedestrian crossings should be present.	Are there adequate pedestrian routes to local amenities?	1	Trust		There are pavements to all facilities and maps are provided in the hospital.	The design team must provide plans showing the locations of pedestrian routes and the routes to local amenities.	Map provided by Trust in the hospital
			Where are these routes documented?				Maps are provided by the Trust in the hospital.		
T 2.11	**Links with LA21 transport plans**	One credit will be awarded where there has been consultation and the forming of partnerships with big employers in line with Local Agenda 21 transport initiatives. If the Local Authority does not use LA21 click on N/A	Do transport initiatives make reference to Local Agenda 21 transport initiatives? If the local authority does not use LA21this credit does not apply	1	Trust		The Trust have meetings with Camden Council and work together to review the green transport policy. The Trust are doing green transport assessment as part of business case.	Does the local authority have a local agenda 21 transport plan? Does the trusts transport initiative make reference to Local Agenda 21 transport initiatives? What is the reference of the document or specification which gives detail of the LA 21 initiatives? What are the references of the correspondence between the design team / trust and the local authority describing the links or confirming that no initiative is available?	A review of the green transport policy is ongoing and regularly updated.

		www.la21-uk.org.uk	What is the name of the LA21 initiative referred to above?				Camden LA21 agenda.		
			Total Transport Score	**91%**					
Water					Overall Responsibility: M&E				
W 2.1	**Water leak detection**	One credit will be awarded where a water leak detection system is installed to cover all mains supplies, in order to detect large scale leaks.	Is a water leak detection system installed to cover all main supplies?		WSP		There will be leak detection in the tank bunds (water storage tanks). Water consumption will be monitored as part of the BEMS logging analysis.	The design team must provide details of the system to be installed. This must include a description of how leaks are detected and who is responsible for monitoring the alarm.	As before.
			What type of detection system is installed?						
W 2.2	**Proximity detection**	One credit will be awarded where proximity detection shut off for water supply is installed to toilet areas, laundries, kitchens, bath and shower areas and washrooms. Areas in 24 hour use can be excluded from this requirement	Is proximity detection shut off for water supply installed in toilet areas?	1	WSP		Yes proximity detection shut off to be included in all areas. 24 hour occupation areas are exempt from this requirement.	Is proximity detection shutoff fitted to all such areas? What type of detection system is installed? Which areas are not covered by the shutoff system and why?	Stage D report - will be put into applicable areas. Requirement of credit to be met.
			What type of detection system is installed?				WSP to provide further details when design progresses.		
W 2.3	**Water Efficient Fittings**	One credit will be awarded when three of the water efficient fittings listed below are used: - waterless urinals - spray heads on taps - low flush toilets - proximity detection controls on wash hand basins	Are water efficient fittings used?	1	WSP, LDY		Low flush toilets, automatic taps only so no credit can be awarded.	The design team must supply details of the sanitary fittings (not including WC's) to be fitted. If any fixtures are fitted which are not in the list above calculations must be provided showing the potential savings.	Proximity taps and low flush toilets and low flow heads on showers. Spray heads will no be fitted
			List the water efficient fittings used						
W 2.4	**Low flush toilets**	One credit will be awarded where low flush toilets (i.e. less than 5 litres in capacity) are specified.	Are low flush toilets used?	1	WSP, LDY		Low flush toilets will be specified by LDY.	Are low flush toilets used? What capacity of cistern has been specified or is being used? What flow restrictors are to be used to minimise the water use per flush? What are the references of the drawings / documents / data sheets which give the specification of the toilet fittings?	Credit to be met.
			What capacity of cistern has been specified or is being used?				LDY to provide further details when design progresses.		
W 2.5	**Reduce water usage on planted areas**	One credit will be awarded where plants and shrubs which require little or no watering have been specified. Gardens should also be designed with shading and ground cover to reduce evaporative losses.	Is there a policy to specify plants and shrubs that require little or no watering?	1	Architect		Specific plants for low water usage. Included in specification. LA in practice	The design team must supply details of the planting selected and a justification of the species selected.	Hard to achieve this credit as want to get good amenity value. So won't achieve credit.
			Where is this policy documented?						
W 2.6	**Water meters**	One credit will be awarded where a water meter is installed to monitor all supplies to all buildings. One meter for the whole site will not satisfy the criteria for this credit.	Is a water meter installed to all supplies to buildings? This should be the case for each building.	1	WSP		Water meters will be supplied and linked to the BEMS.	Is a water meter installed to all supplies to buildings? What is the reference of the drawing showing the locations of the meters?	As before
			Where is this specified?				Further details required as the design progresses.		
W 2.7	**Recycle Water**	One credit will be awarded where there is provision for the collection and use of rain water.	Are water recycling schemes present?		WSP, LDY		WSP are not intending to include any water recycling facilities in the design.	Details of the specified installation must be provided together with reports covering the hygiene / health impact reviews for any patient / treatment or other high risk areas.	As before
			What schemes are being used?						
W 2.8	**Use of Rain water**	One credit will be awarded where there is provision for the collection and use of rain water.	Is there a provision for the collection and use of rain water?	1	WSP, LDY		LDY to investigate collection of rainwater for watering landscaped areas.	Will rain water be collected and used onsite? What will the rainwater collected be used for? What is the predicted quantity of rainwater that will be collected?	An aspiration, green roofs are self watering from rain water. Sedum roof will not need watering. Sky garden level 8, sedum roof level 9, The limited run off fro m the sedum roof locally for use in the garden below.
			How is it collected and used?						
W 2.9	**Boiler blow down**	One credit will be awarded where boiler blow down is monitored and re-used.	Is boiler blow down monitored and re-used?		WSP		No boiler blow down predicted.	Is boiler blowdown monitored and re-used? What is the model and make of the boiler? What is the reference of the document containing details of the boiler?`	Not applicable as no steam boilers - local electric humidification.
			Where is boiler blow down re-used?				WSP please clarify if there are any steam boilers on site for sterilisation or humidification or any other purpose.		
				67%					
Materials					Overall responsibility: Architect				

Mt 2.1	**Asbestos**	One credit will be awarded where the use of asbestos is explicitly prohibited for all new building works.	Is the use of asbestos explicitly prohibited in the specification?	1	LDY		Credit requirements will be met and asbestos will be prohibited.	The design team must provide a copy of the specification which prohibits the use of asbestos in all new building works. NOTE: asbestos is still used in lift brake pads and similar applications	As before
			What is the reference number for this clause in the specification?						
Mt 2.2	**Recycled materials**	One credit will be awarded where there is a significant use of recycled materials such as crushed aggregate or masonry in sub base, ground slabs, roads etc.	Is there any use of crushed aggregate, masonry, or other recycled material in the structure, sub base, ground slabs or roads?	1	WSP, LDY		Recycled material will be reused temporarily in piling mats. The site is restricted and therefore there may be problems with storage on site and reuse. WSP stated that the structure will include recycled content. PFA to be used. WSP structural to include recycled content in specification. Percentage of recycled content to be stated. Some of the existing facade will be re-used.	The design team must provide details of the specified uses and volumes for recycled aggregates.	Statement in Stage D report with percentage stated in later detailed design.
		Note that parts of a building being retained as part of a refurbishment project should be considered as qualifying for this credit.	Where are recycled materials as listed above used?						
Mt 2.3	**Sustainable timber for construction**	One credit will be awarded where timber for key elements including structural timber, cladding, carcassing, internal joinery is specified to have come from sustainably managed sources.	If any timber is specified for construction, is it all from sustainably managed sources?	1	LDY		Timber used in the development will all be FSC procured and will comply with the credit requirements.	If any timber is specified for construction, is it all from sustainably managed sources? What is the reference of the clause in the specification requiring the use of sustainably sourced timber? Has a supplier been found that can meet the expected demand?	As before
		If no timber is specified, or if timber is to be reused, the credit should be achieved, so the question should be answered Yes by using the "Yes" button.	How can it be demonstrated that the timber is from a sustainably managed source? i.e. Is all timber from a Forest Stewardship Council compliant source or all softwood timber?				LDY to monitor through the construction process.		
Mt 2.4	**Sustainable timber fittings**	One credit will be awarded where timber for fittings is specified to have come from sustainably managed sources and the source of the timber can be verified as being sustainably managed.	If any timber is specified for fittings is it all from sustainably managed sources?	1	LDY		Timber used in the development will all be FSC procured and will comply with the credit requirements.	If any timber is specified for construction, is it all from sustainably managed sources? What is the reference of the clause in the specification requiring the use of sustainably sourced timber? Has a supplier been found that can meet the expected demand?	As before
		If no timber is specified, or if timber is to be reused, the credit should be achieved, so the question should be answered Yes by using the "Yes" button.	How can it be demonstrated that the timber is from a sustainably managed source? i.e. Is all timber from a Forest Stewardship Council compliant source or all softwood timber?				LDY to monitor through the construction process.		
Mt 2.5	**Designing for longevity**	One credit will be awarded where there is suitable vehicle impact protection (such as bollards and pavements) for external protection. This is particularly for around Goods Doors/ambulance drop off areas. This will prolong the life of the building and reduce maintenance costs. Internally are walls protected with guard rails, are doors protected against impact etc.	Are any exposed parts of the building protected from possible vehicle impact?	1	LDY		Credit requirements will be met.	Are any exposed parts of the building protected from possible vehicle impact? Which parts of the building are protected and how are they protected? What are the references of the drawings showing the impact protection measures?	Drawings for Stage D report external works drawings. Automatic doors for internal corridors for trolleys etc. Strategy for protecting routes in stage d report.
			How are exposed parts of the building protected?						
Mt 2.6	**Hard landscaping materials**	One credit will be awarded where hard landscaping and fencing obtains an A rating from the "Green Guide to Specification", or equivalent. When using a number of different hard landscaping specifications the proportion of each must be calculated. Greater than 80% of the hard landscaping specifications must achieve an "A" rating. With refurbishment, if no more than 20% extra new material is added this credit is achieved	Does the hard landscaping and fencing achieve a rating of "A" in "The Green Guide to Specification", or equivalent?	1	LDY		LDY will be specifying hard landscaping. Some trims may be a B rated but over 80% will be A rated and therefore meet the credit requirements.	Does the hard landscaping and fencing achieve a rating of "A" in "The Green Guide to Specification", or equivalent? If there is no hard landscaping this credit is not applicable. What are the types of hard landscaping and fencing specified and what are the closest matches in "The Green Guide to Specification"? What is the reference of the clause within the specifications or drawing which specify the hard landscaping materials?	As before. All timber FSC, Ttura 80% recycled glass in a resin for paths being investigated.
		A copy of the latest edition of the "Green Guide to Specification" can be ordered from www.brebookshop.com	What are the types of hard landscaping and fencing specified and what are the closest matches in "The Green Guide to Specification"?						

Mt 2.7	**Upper floor slab**	One credit will be awarded where the upper floor slab obtains an A rating from the "Green Guide to Specification", or equivalent. When using a number of different upper floor slab specifications the proportion of each must be calculated. Greater than 80% of the upper floor slab specifications must achieve an "A" rating. With refurbishment, if no more than 20% extra new material is added, this credit is achieved	Does the upper floor slab achieve a rating of "A" in "Green Guide to Specification", or equivalent?		LDY, WSP		Upper slabs will be concrete frame post tensioned thin concrete flat slab which will is unlikely to achieve an A rating due to the amount of concrete required.	Do each of the above specifications achieve a rating of "A" in "The Green Guide to Specification", or equivalent? What are the materials specified for each of the above building elements and what are the closest matches in "The Green Guide to Specification"? What is the reference of the clause within the specifications or drawing where each of the materials are specified?	As before
			What is the type of upper floor slab specified and what is the closest match in "The Green Guide to Specification"?				Specification to be sent through from LDY as design progresses.		
Mt 2.8	**External wall**	One credit will be awarded where the external wall obtains an A rating from the "Green Guide to Specification", or equivalent. When using a number of different external wall specifications, the proportion of each must be calculated. Greater than 80% of the external wall specifications must achieve an "A" rating. With refurbishment, if no more than 20% extra new material is added, this credit is achieved.	Does the external wall achieve a rating of "A" in "Green Guide to Specification", or equivalent?		LDY		External walls specification not completely fixed yet and will probably achieve a B rating.	Do each of the above specifications achieve a rating of "A" in "The Green Guide to Specification", or equivalent? What are the materials specified for each of the above building elements and what are the closest matches in "The Green Guide to Specification"? What is the reference of the clause within the specifications or drawing where each of the materials are specified?	Lightweight rainscreen construction - externally insulated sto render with polystyrene blocks. Stone screen Portland stone on a frame with insulation behind compliant with insulation credit. LDY to ask BRE to assess Green guide to Specification performance of composite materials if required to check whether this credit could be achieved
			What is the type of external wall specified and what is the closest match in "The Green Guide to Specification"?				Specification to be sent through from LDY as design progresses. Externally insulated render system may be used.		
Mt 2.9	**Internal wall**	One credit will be awarded where the internal wall obtains an A rating from the "Green Guide to Specification", or equivalent. When using a number of different internal wall specifications, the proportion of each must be calculated. Greater than 80% of the internal wall specifications must achieve an "A" rating. With refurbishment, if no more than 20% extra new material is added, this credit is achieved	Does the internal wall achieve a rating of "A" in "Green Guide to Specification", or equivalent?	1	LDY		Internal walls to be blockwork and internal stud partitions which achieve an A rating.	Do each of the above specifications achieve a rating of "A" in "The Green Guide to Specification", or equivalent? What are the materials specified for each of the above building elements and what are the closest matches in "The Green Guide to Specification"? What is the reference of the clause within the specifications or drawing where each of the materials are specified?	Same
			What is the type of internal wall specified and what is the closest match in "The Green Guide to Specification"?						
Mt 2.10	**Roof**	One credit will be awarded where the roof obtains an A rating from the "Green Guide to Specification", or equivalent. When using a number of different roof specifications, the proportion of each must be calculated. Greater than 80% of the roof specifications must achieve an "A" rating. With refurbishment, if no more than 20% extra new material is added, this credit is achieved	Does the roof achieve a rating of "A" in "Green Guide to Specification", or equivalent?		LDY		Roof is likely to be an Inverted flat roof which may achieve an A rating. Need more detailed specification to check if this credit can be awarded.	Do each of the above specifications achieve a rating of "A" in "The Green Guide to Specification", or equivalent? What are the materials specified for each of the above building elements and what are the closest matches in "The Green Guide to Specification"? What is the reference of the clause within the specifications or drawing where each of the materials are specified?	Inverted roof on metal deck with sedum on top. The majority of roofs are as above. LDY to send through specification.
			What is the type of roof specified and what is the closest match in "The Green Guide to Specification"?				Specification to be sent through from LDY as design progresses.		
Mt 2.11	**Windows**	One credit will be awarded where the window design obtains an A rating from the "Green Guide to Specification", or equivalent. When using a number of different window specifications, the proportion of each must be calculated. Greater than 80% of the window specifications must achieve an "A" rating. With refurbishment, if no more than 20% extra new material is added, this credit is achieved	Does the window specification achieve a rating of "A" in "Green Guide to Specification", or equivalent?		LDY		Windows are likely to be aluminium composite windows which achieve a B rating.	Do each of the above specifications achieve a rating of "A" in "The Green Guide to Specification", or equivalent? What are the materials specified for each of the above building elements and what are the closest matches in "The Green Guide to Specification"? What is the reference of the clause within the specifications or drawing where each of the materials are specified?	Same as before
			What is the type of window specified and what is the closest match in "The Green Guide to Specification"?						
Mt 2.12	**Floor Covering**	One credit will be awarded where the floor covering design obtains an A rating from the "Green Guide to Specification", or equivalent. When using a number of different floor covering specifications, the proportion of each must be calculated. Greater than 80% of the floor covering specifications must achieve an "A" rating. With refurbishment, if no more than 20% extra new material is added, this credit is achieved	Does the floor covering specification achieve a rating of "A" in "Green Guide to Specification", or equivalent?	1	LDY		Floor coverings to be hardwood sheathing with lino on top which achieve an A rating.	Do each of the above specifications achieve a rating of "A" in "The Green Guide to Specification", or equivalent? What are the materials specified for each of the above building elements and what are the closest matches in "The Green Guide to Specification"? What is the reference of the clause within the specifications or drawing where each of the materials are specified?	As before. Rubber may be used instead of lino. Restaurant may be stone floor.
		Wet areas i.e. showers, physiotherapy pools, etc can be excluded.	What is the type of covering specified and what is the closest match in "The Green Guide to Specification"?						

Mt 2.13	**Segregation of construction waste**	One credit will be awarded where there is segregation of construction waste into skips. Examples of waste to be segregated include - aggregates? - metal? - timber?	Will on site construction waste be segregated to increase the proportion of waste that is recycled?	1	Trust, Developer		The Trust will require in tender documents that construction waste is segregated by the developer.	Will on site construction waste be segregated to increase the proportion of waste that is recycled? What categories of waste will be segregated? If a waste contractor is already nominated what is the reference of the contract / letter of appointment which sets out the waste categories to be sorted? Otherwise what is the clause requiring the segregation and recycling of waste?	Trust will commit to it. Could use SMARTwaste linked to considerate contractor's Scheme
			Who is responsible for this process?				Trust to include in specification documents.		
			Total Materials Score	**69%**					
Landuse and Ecology					Overall Responsibility: Trust				
L&E 2.1	**Land of low ecological value**	The land can be classified as being of low ecological value of all of the following features are absent from the land to be built upon: - trees and hedges over 1m high? - ponds, streams and rivers; - marshes; - natural meadow; - heathland.	Is the land to be built on of low ecological value?	1	Trust		All land to be developed has either existing buildings or is hard landscaped.	The design team must provide details of the site ecology. If a site survey has been carried out this must be provided. Where no site survey has been carried out the design team must provide confirmation that the site is free of any of the features listed above.	same as before
			What is the land to be built upon currently being used for?						
L&E 2.2	**Protection of ecological features**	One credit will be awarded where all ecological features (trees over 100mm trunk diameter, hedges, ponds, streams etc) will be maintained and adequately protected during construction. The tender submissions should be checked to ensure that this is expressly stated	Will all ecological features present on the site be maintained and adequately protected during construction? If there are no ecological features, please enter "1".	1	Trust		There are no existing ecological features that require protection.	The design team or client must provide a copy of the contract specifications and ensure that they cover the following: - That existing mature and semi-mature trees will be protected from direct impact and from compression around their root systems during construction. - That hedges and unaffected 'natural areas' will be fully protected and construction activity (storage or any other activity) should no be allowed in these areas. - That watercourses and wet lands on or near to the site are protected from surface run off and ground leaching from construction activities on site.	same as before
			How will ecological features be protected?						
L&E 2.3	**Change in ecological value**	Up to four credits to be awarded dependent on change in ecological value. The change is estimated using the attached Ecological Value calculator. Please note that before and after areas must be numerically equal.	Change to be assessed by using Ecological Value calculator. Out of a maximum of 4 credits	3	LDY		LDY have calculated credit using ecological calculator. Ecological impact is positive with areas of fertile grassland for green roof, infertile grassland for brown roof and courtyards as wildlife garden planting to be added in place of hard landscaping.	The design team must provide details of the Landuse. Giving areas and vegetation types before and after development.	
L&E 2.4	**Ecological actions**	One credit will be awarded where seeking and acting on advice from Wildlife Trusts (AWTC) on ecological enhancement.	Is advice on ecological enhancement of the site from a fully qualified ecological advisor being sought and acted upon?		LDY	LDY to check if their ecologist is registered with AWTC, IEMA or IEEM.	LDY do have ecologists within their practice but they may not be registered with the AWTC, IEMA or IEEM which is required to achieve the credit.	Has an ecological survey been carried out? What are the actions identified in this report? Who carried out the ecological assessment? Which of the above organisations are they a member of? What is the reference of the ecological survey?	LDY do have a IEMA member but management consultant member.
			What is the name of the organisation providing ecological advice for the project and what is the name of the main contact?						
L&E 2.5	**Natural habitats**	One credit will be awarded where natural habitats (preferably indigenous species) are introduced to produce pleasant surroundings for patients.	Have natural habitats been introduced to the site in such a way as to provide pleasant surroundings for patients?	1	LDY		New l landscapes are being introduced as roof gardens/ courtyards. Ecological impact is positive with areas of fertile grassland for green roof, infertile grassland for brown roof and courtyards as wildlife garden planting to be added in place of hard landscaping.	Have natural habitats been OR will they be introduced to the site in such a way as to provide pleasant surroundings for patients? What natural habitats have been introduced? What is the reference of the drawing or document which identifies these natural habitats?	
			Please describe briefly how this will be done.						

L&E 2.6	**Land previously built upon**	One credit will be awarded where the proposed site for new buildings has been previously built on or used for industrial purposes within the last 50 years.	Has the proposed site been previously built on or used for industrial purposes within the last 50 years?	1	Trust		The site has existing buildings.	The design team must provide details of the previous use. As existing drawings should be provided where the previous use was recent. If the use is historic, drawings or other evidence of the historic use should be provided together with relevant dates for this use.	
			What was the previous use of the site and in which year?						
L&E 2.7	**Use of contaminated land**	One credit will be awarded where the land used for new buildings is defined as contaminated and adequate steps have been taken to contain or clean the site prior to construction.	Is the land to be used defined as contaminated and will it be professionally decontaminated?		Trust		No contamination is believed to be present on the site.	One credit will be awarded where the land used for new buildings is defined as significantly contaminated and adequate steps have been taken to contain or clean the site prior to construction.	
			What is the nature of the contamination and where are details of decontamination steps documented?						
			Total Landuse and Ecology Score	**70%**					
Pollution					Overall Responsibility: M&E				
P 2.1	**Refrigerant ODP**	One credit where all refrigerants used have ZERO ozone depletion potential (ODP). Credit is also achieved by absence of refrigerants.	Is the use of ozone depleting refrigerants in air conditioning systems avoided?	1	WSP		Ozone depleting refrigerants will be avoided and ammonia used.	Is air conditioning specified? If air conditioning is specified what is the total charge in kg? Which refrigerant has been specified? What is the reference of the document where the refrigerant is specified?	Specification for refrigerants to be provided in Stage D report. No longer using ammonia.
			What type(s) of refrigerants are used, if any?				Ammonia.		
P 2.2	**Ozone Depletion Potential of insulation material**	One credit where there are no materials containing ozone depleting substances. This could be ensured by including a suitable exclusion clause in the specification or naming particular types of insulants.	Are all insulants free of ozone depleting substances(ODS)?	1	LDY, WSP, Trust		Specification will require that Ozone Depleting Substances are not used in insulation.	The design team must provide the specification clause excluding the use of ODP containing insulants. If the insulants to be used are already selected then details of the types and confirmation that they both contain no ODS's and that no ODS's were used during their manufacture.	
			Which insulants have been specified and what blowing agents are used, if any?						
P 2.3	**Refrigerant leak detection**	One credit where refrigerant leak detection system covering high-risk parts of plant (the coil can be omitted from this) or no refrigerants. This is to detect small leaks of refrigerant.	If refrigerants are used in air conditioning systems, are leak detection systems installed? If no refrigerants have been used, please answer yes	1	WSP		Part F regulations now include this requirement so the building will comply with this credit.	Are refrigerants used? Are leak detection systems installed? What refrigerant is used? What is the total charge of refrigerants? What is the reference of the specification clause or document which specifies the type of refrigerant to be used?	
			Which refrigerant leak detection systems are used?						
P 2.4	**Automatic refrigerant pump**	One credit where provision of automatic refrigerant pump down to coil or storage tanks with isolation valves or no refrigerants. This credit applies is valid for refrigerants with zero ozone depletion potential as they have a significant global warming potential.	Is there a refrigerant pump down system and are there isolation valves? If the use of refrigerants is completely avoided, please enter "1"	1	WSP		WSP to include in the specification.	Is there a refrigerant pump down system connected to the refrigerant leak detection system? Is the pump down of refrigerant automated and controlled by the refrigerant leak detection system? In which document or file reference are the procedures for operating the above documented?	
			In which document or file reference are the procedures for operating the above documented?						
P 2.5	**Water run off reduction**	One credit where site facilities reduce potential for run off to natural watercourses and/or municipal watercourses by 50%.	Does the site include measures to reduce the rate of water run off to watercourses such as porous hard surfaces (not suitable for heavy duty areas) or holding tanks or ponds?	1	WSP, LDY		Green roofs to be used and SUDS to be investigated. The design will include rain water collection for watering landscaped areas.	Does the site include measures to reduce the rate of water run off to watercourses such as porous hard surfaces (not suitable for heavy duty areas) or holding tanks or ponds? What is the reference of the document containing the calculations demonstrating the 50% reduction in peak water runoff? What is the reference of the drawing showing the methods for reducing runoff?	
			Which methods of water run off reduction are used and where?				Specification needs to be finalised by LDY, WSP.		
P 2.6	**Water run off pollution reduction**	One credit where site facilities reduce potential for pollution of natural watercourses and/or municipal watercourses by the use of on site treatment such as oil interceptors or filtration.	Are oil interceptors or filtration present to prevent pollution of watercourses?	1	WSP, Trust		Drainage will have oil interceptors. The Environment Agency want a method to prevent drainage going out in case of an emergency.	Are oil interceptors or filtration present to prevent pollution of watercourses? What type of oil interceptors or filtration is used and where are they installed? What is the reference of the document / drawing / specification clause where the specification of filtration is specified?	
			What type of oil interceptors or filtration is used and where is it installed?				WSP, Trust to provide further details when design progresses.		
P 2.7	**Boiler NOx emission rates 1**	If heating is supplied by national grid electricity this credit can not be achieved unless power is being obtained from renewable energy or CHP. If CHP is specified, suppliers figures for NOx emissions must be obtained.	Is the NOx emission rate of the heating plant below 150 mg/kWh?	1	WSP		Low NOX boilers proposed to be below 70 mg/kWh (below 40 mg/kWh may be possible).	What is the NOx emission rate of the burners installed? If there are more than one set burners installed what is the predicted use of each of the systems? i.e. 50:50, 60:40 etc What units was the data supplied in? Where are the calculations demonstrating the conversion to the required units?	

			What is the source of this data?						
P 2.8	**Boiler NOx emission rates 2**	If heating is supplied by national grid electricity this credit can not be achieved unless power is being obtained from renewable energy or CHP. If CHP is specified, suppliers figures for NOx emissions must be obtained.	Is the NOx emission rate of the heating plant below 70 mg/kWh?	1	WSP		Low NOX boilers proposed to be below 70 mg/kWh (below 40 mg/kWh may be possible).		
			What is the source of this data?						
P 2.9	**Boiler NOx emission rates 3**	If heating is supplied by national grid electricity this credit can not be achieved unless power is being obtained from renewable energy or CHP. If CHP is specified, suppliers figures for NOx emissions must be obtained.	Is the NOx emission rate of the heating plant below 40 mg/kWh?		WSP		Low NOX boilers proposed to be below 70 mg/kWh (below 40 mg/kWh may be possible).		
			What is the source of this data?						
P 2.10	**Hazardous substances list**	One credit where a list of all hazardous substances, as defined in COSHH, that are used onsite is compiled	Have all hazardous substances (as defined in COSHH) been identified?	1	Trust		Checks will be carried out later on in the design process, developer will need to comply with COSHH regulations. Estates and facilities to check compliance of this credit.	Have all hazardous substances (as defined in COSHH) been identified? What is the reference of the report or document containing this list?	
			Where can this list be found?						
P 2.11	**Hazardous substances replacements**	One credit where at least 80% of hazardous substances, identified in the above list are replaced with safer alternatives.	Have replacements of hazardous substances (as defined in COSHH) been found?	1	Trust		Checks will be carried out later on in the design process, developer will need to comply with COSHH regulations. Estates and facilities to check compliance of this credit.	Have replacements of hazardous substances (as defined in COSHH) been found? What proportion of the hazardous substances used have been replaced with safer alternatives? What is the reference of the report / document which lists the replacements identified?	
			Where are these replacements recorded?						
P 2.12	**Noise pollution**	One credit will be awarded where an environmental noise assessment will demonstrate that the rating level of the new plant, associated with the new building works, does not exceed the background noise level as defined in BS 4142) by more than 5dB?	Will an environmental noise assessment demonstrate compliance with guidance?		Trust		An acoustic survey has been done and was required by Camden Council. The design team need to clarify which HTM they are going to comply with. Compliance has not been checked yet.	Will an environmental noise assessment demonstrate compliance with guidance? Where is this assessment documented?	Acoustic survey
			Where is this assessment documented?						
				83%					
Internal Environment					Overall Responsibility: Architect and M&E				
IE 2.1.1	**External facades ventilation**	One credit will be awarded where the total area of openable facades is equal to 2.5% of the total floor area. Even if the building is air conditioned, the provision of openings might allow the building to benefit from natural ventilation at some point in the future. Circulation spaces can be excluded from this calculation.	Will the total area of openable facades equal 2.5% of the total floor area?	1	WSP, LDY		Opening windows will probably meet this requirement. Area of openable windows will be calculated in the outline design phase.	The design team should commit to providing openable windows as detailed above in the credit criteria. Where air conditioning is installed the area should still be verified along with the facility for openable windows, thus maintaining the flexibility of the space.	
			What type of openable windows are specified?					What is the area of openable façade? What is the internal gross floor area? What are the references of the documents / drawings or data sheets which where used to calculate both the floor area and the area of openable façade?	
IE 2.1.2	**External facades ventilation**	One credit will be awarded where the total area of openable facades is equal to 5% of the total floor area. Even if the building is air conditioned, the provision of openings might allow the building to benefit from natural ventilation at some point in the future. Circulation spaces can be excluded from this calculation.	Will the total area of openable facades equal 5% of the total floor area?		WSP, LDY		This credit will not be achieved.		
			What type of openable windows are specified?						
IE 2.2	**Humidification**	One credit will be awarded where there is no humidification or all humidification is steam humidification. Steam is the only failsafe method of providing safe humidification at present.	Is humidification avoided or is only steam humidification intended to be used?	1	WSP		Only steam humidification to be used.	Is humidification specified? What is the type of humidification specified? What is the reference of the drawing, report or data sheet which gives details of the system specified?	
			Which areas are humidified?				Major treatment areas and intensive care wards, operational theatres.		

IE 2.3	**Fresh air rate**	Specific air change rates for each building function can be found in HTM 2025	Are air change rates in compliance with HTM 2025 and naturally ventilated areas to include trickle vents?	1	WSP		Air change rates to be in compliance in compliance with HTM2025.	Are air change rates in compliance with HTM 2025? Do all naturally ventilated areas include trickle vents? What are the fresh air rates of each space? What is the reference of the document or data sheets which set out the fresh air rates of each space?	Daylighting and fresh air calcs.
			What is the air change rate specified?				Air change rates in wards will vary between 2 and 15 air changes/hour.		Daylighting modelling from WSP.
IE 2.4	**Daylighting**	HBN 40 states that all spaces occupied by patients should be daylit where possible. The design should be in compliance with HBN 40 (available from NHS Estates) and the following criteria: - average daylight factor of at least 2%; - room depth criterion (d/w + d/h < 2/(1- Rb) , where d = room depth, w = room width, h = room height and Rb = average reflectance of surfaces in rear half of room	Is the design in compliance with HBN 40 AND adequately daylit?	1	LDY, WSP		WSP have done some daylight calculations and expect the design to comply with HBN 40. However some deep plan areas may not achieve adequate daylighting. Perimeter areas would meet a daylight factor of 5. It is not desirable for some clinical spaces to meet daylighting requirements. Wards will generally meet daylight factors specified in the credit.	What is the average daylight factor? Is the room depth criterion met in at least 80% of the spaces? What is the reference of the document setting out the calculations demonstrating that the criteria are met What are the references of the drawings / data sheets used to calculate the daylight factor and room depth?	
		For refurbishment projects the use of true daylight lamps in deep plan areas or areas with no or few windows is sufficient t award this credit.	Where are these design calculations shown?				Daylighting calcs to be included in next stage of the design process.		
IE 2.5	**Blind control**	One credit will be awarded where there are occupant controllable internal or external blinds to control glare.	Are occupant controllable blinds fitted to reduce glare from the sun?	1	LDY		LDY will be investigating. Office areas to have controllable blinds. Interpanel blinds a possibility.	Will occupant controlled blinds be installed on all windows? What type of blinds will be installed Where are occupant controlled blinds not installed? What is the reference of the document, data sheet or drawing giving details of the occupant controlled blinds?	Blinds on east and west facades - high performance glass without louvers. Preference for interpanel blinds. Blind issue to be done in detailed design issue. Their needs to be joined up thinking between users and designers and inform heat gain calculations .
			What type of blinds are used?						
IE 2.6	**High frequency ballasts**	One credit will be awarded where high frequency ballasts are fitted in luminaires.	Are high frequency ballasts fitted in all luminaires?	1	WSP		Yes	Will fluorescent lighting be specified? Will all fluorescent luminaires be fitted with HFB's? What is the reference of the document, data sheet or drawing giving details of the luminaires specified?	
			What models have been specified?				Further details to be provided as design progresses.		
IE 2.7	**Noise**	One credit will be awarded where an assessment of the predicted noise levels has been carried out, which demonstrates compliance with the Rw levels as defined in HTM 2045 (1996)	Has a study of noise levels been carried out by the design team?	1	WSP Acoustics		WSP acoustics have produced a study of noise levels.	Has a study of noise levels been carried out by the design team? Who carried out the acoustics study? What is the reference of the report?	WSP study of noise levels
			What is the reference of the report?				HTM 2045 is currently under review and HTM 56 is now in its third edition. Both these documents are current and cross reference each other. The credit requires compliance with both documents.		
IE 2.8	**Living plants**	One credit will be awarded where there is a budget for the provision of living plants within buildings.	Is there a reasonable budget for the provision of living plants within buildings?	1	Trust		The Trust will provide a budget (Estates and Facilities).	What is the budget for the provision of living plants in the hospital? Who is responsible? Where will the living plants be installed? What is the reference of the document, data sheet or drawing giving details of the locations/plants specified?	
			Who is responsible for administering this budget?				Estates and Facilities		
IE 2.9	**Cooling towers**	One credit will be awarded where cooling towers (if present) are designed for easy access for maintenance.	If cooling towers are present, are they designed in accordance with HSG (70) to allow easy access for maintenance? (If no cooling towers are present, enter "1")	1	WSP		Yes, will be in compliance, cooling towers present.	Will cooling towers be specified? If cooling towers are specified are they in line with HSG (70)? What is the reference of the document, data sheet or drawing giving details of the location and specification of the cooling towers?	
			Where are design details of the cooling towers documented?						
IE 2.10	**Air intake pollution**	One credit will be awarded where - air intakes (including openable windows) are at least 20m from major sources of pollution such as major roads, vehicle manoeuvring areas and industrial extracts - air intakes and extracts are at least 10m apart to avoid recirculation.	Are air intakes (including openable windows) at least 20m from major sources of pollution AND Are air intakes and extracts are at least 10m apart to avoid recirculation?		WSP		The credit is unachievable due to main roads around all the site. Air pollution levels are above WHO advisory level for pollutants.	What is the minimum distance between extract and intake? What is the minimum distance from the intake to a source of pollution? What is the reference of the drawing which shows the locations of the intakes and extracts?	
			What are the nearest sources of pollution?						
IE 2.11	**Legionellosis : DHW**	One credit will be awarded where dhw systems have been designed to minimise the risks of Legionellosis. Compliance with CIBSE TM13 is the most recognised method of ensuring that the risk of Legionellosis is minimised.	Have the domestic hot water systems been designed in accordance with CIBSE TM13 in order to minimise the risks of Legionellosis?	1	WSP		Yes hot water systems will be designed to comply.	The design team must confirm compliance with either TM13: NEW Minimising the risk of Legionnaires' disease – CIBSE 2000 and/or Approved code of practice and guidance – The control of legionella bacteria in water systems. HSC 3rd Ed. 2000	

			Which member of the design team was responsible foe ensuring compliance with CIBSE TM13?				WSP		
IE 2.12	**Thermal comfort assessment**	One credit will be awarded where the building design has been subject to a thermal assessment of peak summertime conditions in accordance with CIBSE guidance. This could be a computer based simulation and it should predict the peak summertime internal temperatures.	Has an assessment, in accordance with CIBSE Guide Vol A, been made to predict summertime thermal comfort conditions?		WSP	WSP to provide details of thermal comfort assessment method.	WSP have done calculations and will be doing modelling. WSP are not sure if it will be in accordance with CIBSE guidance as specified in the credit. The Trust have specified a 25 degree temperature limit for all areas.	The design team must confirm compliance with either TM13 NEW Minimising the risk of Legionnaires' disease – CIBSE 2000 and/or Approved code of practice and guidance – The control of legionella bacteria in water systems. HSC 3rd Ed. 2000	IES thermal modelling package used by WSP. Equivalent to TAS industry standard package. 25 degree limit for all patient areas. So only doesn't include restaurant mixed mode and other service areas.
			What method of thermal assessment was used and who was responsible for it?				WSP to provide details of thermal comfort assessment method. The CIBSE guide allows a flexible approach for high summer temperatures, limiting internal temperatures to 25 degrees is going to incur unnecessary capital cost and energy penalties.		Explanation of how got to strategy for shading doesn't really exist. High performance glass and briese soleil as building is self shaded anyway. External gain - has this been looked at? WSP must demonstrate that the external gains ahave been minmised and that windows optimised with regard to minimising overheating and the need for mechanical coooing without over heating. This fuindimental to the desigr solution
IE 2.13	**Views Out**	One credit will be awarded where there has been attention during planning paid to the value of views from occupied rooms, particularly for wards, offices, waiting areas, etc. In order to comply with this credit all beds/workstations etc must be within 7m of a window.	Do all relevant areas (listed in guidance section) have a view of an external window?		LDY		All areas have a view of a window. All bed areas within 7m of a window. Offices areas ok. Nurse stations are not within 7m of a window.	Are all workstations within 7m of an external window or window to courtyard? Are all bed spaces within 7m of an external window or window to courtyard? Are all waiting areas within 7m of an external window or window to courtyard? What are the references of the drawings which can be used to demonstrate the compliance or non-compliance of this credit?	
			Which parts of the design have been adjusted to give pleasant views out?				Not many views on site ADY		
IE 2.14	**Problem Odours**	One credit will be awarded where key odour problems have been identified and an action plan is in place to address them.	Have key odour problems been identified and is there a prioritised action plan for dealing with the problem odours?	1	WSP		Kitchen odours will be the biggest problem, kitchens have 25 air changes. Air change rates to good practice WSP.	Which areas have been identified as being a potential source of problem odours? Is there a prioritised action plan for dealing with the problem odours? What is the reference of the document which sets out the problem odours and the prioritised action plan?	the outcome of the analysis should feed in to the Mech vent design solution
			Where are details of the problem odours and the action plan documented?				Documented plan to be provided to achieve the credit. A report should consider the risk from other problem odours and evaluated.		
IE 2.15	**Clear Signage/ Wayfinding**	One credit will be awarded where signage follows the guidance within NHS Estates publication "Wayfinding". This is available from NHS Estates.	Does signage follow the guidance within NHS Estates publication "Wayfinding"?	1	LDY		Signage will be designed to comply. There are GOSH hospital wayfinding strategy documents.	The design team must provide the details of the wayfinding and signage strategy and must confirm that the design complies with the guidance set out in "Wayfinding" published by NHS Estates.	should link in with good lignting
		www.doh.gov.uk/nhsidentity	Who is responsible for signage?						
IE 2.16	**Art in New buildings**	One credit will be awarded where there is the use of appropriate art to suit function and aid patient and staff wellbeing.	Is there a reasonable budget for the provision of art within buildings?	1	Trust		£1.5 million has been set aside for art within the building.	What is the budget for the provision of art? What will be provided within this budget? Who is responsible for the selection of art? What are the references of the drawings / documents which identify potential locations for the art?	
			Which member of the design team was responsible for this?				Estates and facilities and LDY to work with the Trust representative.		
				76%					
Social					Overall Responsibility Trust				
S 2.1	**Site heritage**	One credit will be awarded where any parts of the site having historic or heritage value are protected. If there are no parts of the site deemed to have historic or heritage value, then the credit should be answered Yes using the "Yes" button.	Are any parts of the site, that have historic or heritage value, protected?	1	Trust		There are two listed buildings on the site which will be protected.	One credit will be awarded where any parts of the site having historic or heritage value are protected. If there are no parts of the site deemed to have historic or heritage value, then the credit should be answered Yes using the "Yes" button.	
			Where is the process for protecting these parts of the site documented?				The Trust are appointing an architectural historian to advise the team. The site is within the Bloomsbury conservation area.		

S 2.2	**Good neighbour principle**	One credit will be awarded where there is identification and management of local environmental impacts including pollution to air, water and transport.	Are the following local environmental impacts measured? - pollution to air and water, transport	1	Trust		The Trust (Estates and Facilities) will be measuring this as part of their vision.	Are local impacts measured? What sources of pollution have been identified? How will the impacts be measured? Who is responsible for monitoring the impacts? What is the reference of the document / specification clause giving details of this process?	
			Where is the process of this management documented and who is responsible?				Documents exist to show measurement of pollution. Estates and facilities are responsible for these measurements.		
S 2.3	**Links to LA21**	One credit will be awarded where there are links between activities of the site and Local Agenda 21 initiatives. If the relevant local authority does not have a Local Agenda 21 scheme click the N/A button.	Are there any links between activities of the site and Local Agenda 21 initiatives? If the relevant local authority does not have a Local Agenda 21 scheme this credit does not apply	1	Trust		The Trust meets with Camden every 3 monthsor more to discuss employment and green transport initiatives.	The design team must provide evidence of the communication with the local authority and other local groups where appropriate, together with details of any links made.	Still meeting with Camden every 3 months
		Local Agenda 21 is a way for communities, individuals and organisations to move towards sustainable development in their area. All kinds of project work for LA21 is underway in local authorities, voluntary organisations, business and other groups. Please refer to credit T2.11 for more guidance.	Please give at least two examples of such links.						
S 2.4	**Sharing facilities with local communities**	Healthcare sites can be a valuable resource for the local community and should assist by sharing buildings	Does the site share its resources with other services or the local community?		Trust/Architect		The only facility that could be shared by the local community could be the restaurant but this is not a formal hospital policy.	Does the site share its resources with other services or the local community? Which facilities are shared? What is the reference of the document which describes the process?	
			Please give some examples						
S 2.5	**Public consultation**	One credit will be awarded where public consultation was commissioned or existing public consultation for the development used.	Was there public consultation prior to construction?	1	Trust		There has been some public consultation, the Trust have had one open planning meetings so far. There are member and residents meetings. There will be an exhibition in June.	Documents giving details of the occupant consultation process covering the issues at the brief preparation and at the concept / outline design stages. Where appropriate details of the feedback process should be given.	
			Where are the results of the consultation documented?				Minutes and consultation documents available.		
S 2.6	**Action on public consultation findings**	One credit will be awarded where findings and recommendations of public consultation have been considered in the final design	Were the findings of public consultation taken into account in the final design?	1	Trust		So far street architecture, street parking and tree planting feedback from the public consultation has been included in the design.	As above	
			Please give two examples of how the findings were considered in the final design.						
				83%					
Operational Waste					Overall Responsibility: Trust				
OW 2.1	**Paper recycling facilities**	One credit will be awarded where a paper recycling facility is provided for patients and visitors to use.	Are paper recycling facilities provided that both patients and staff can use?	1	Trust		Facilities for paper recycling to be included in the design and space designated for containers.	Are paper recycling facilities provided that both patients and staff can use?	Trust should include this in the Environmental policy and provide clear action plans for implementation
			Where are the recycling facilities located?						
OW 2.2	**Glass recycling facilities**	One credit will be awarded where a glass recycling facility is provided for patients and visitors to use.	Are glass recycling facilities provided that both patients and staff can use?	1	Trust		Glass recycling facilities to provided in the catering area only.	Are glass recycling facilities provided that both patients and staff can use?	Trust should include this in the Environmental policy and provide clear action plans for implementation
			Where are the recycling facilities located?						
OW 2.3	**Drinks can recycling facilities**	One credit will be awarded where a drinks can recycling facility is provided for patients and visitors to use.	Are drinks can recycling facilities provided that both patients and staff can use?	1	Trust		Drinks can recycling facilities to be provided in catering area and near any drinks machine.	Are drinks can recycling facilities provided that both patients and staff can use?	Trust should include this in the Environmental policy and provide clear action plans for implementation
			Where are the recycling facilities located?						
OW 2.4	**Waste Recycling Storage**	One credit will be awarded where there is on site storage for recyclable materials.	Is there provision for the storage of recyclable materials?	1	Trust		Recycling storage will be within the building basement and in the kitchen and FM areas on level 0. Storage will be in a room within the building.	Is there provision for the storage of recyclable materials? What is the reference of the drawing / written confirmation giving details of the provision of recycling facilities?	
			Where is this storage located?						
				100%					

Document reference	comments	Yellow = sufficient supportive evidence not provided Red = can not be achieved Amber = not achieved yet Green = has or will be achieved	Probable score based on green credits at 6 Dec 2006	Amber score if information not available yet was provided	Score achievable if design was changed											
						detail, construction are phases. They are currently at the end of the scheme stage.										
Business Case GTMS See attached section of business case on Post Project Review, item 1.19 (31) GOSH 09 11 061.doc	Commitment to complete post construction NEAT-credit awarded		1	1	1											
Business Case GTMS See attached section of business case on Post Project Review, item 1.19 (31) GOSH 09 11 061.doc	Although a firm commitment has been given by the trust to undertake a Detail Design NEAT assessment this is not committed to in the business case		0	0	1											
(08) Environmental policy revised July 2006.doc James Fry Enviroment officer	There is a policy. However, for the credit to be awarded a web site reference should be provided should be widely accessible by all staff see previous comments. No evidence of how the policy is to be implemented has been provided		0	1	1											
PQQ documents for enabling works and main redevelopment	this is likely to be achieved and needs to be explicitly set out in the output specification		0	1	1											

This information is contained within fees and non works costs of Business Case Forms. See programme attached (32) NEAT Programme.pdf	FBC cost forms are being finalised at present. This information needs to be provided to award the credit		0	1	1												
			0	1	1												
			0	1	1												
WSP draft workmanship clauses for commissioning and quality monitoring: "(10) Part 3 - Mechanical Workmanship & Materials" section 9 and 10 "(11) Part 4 - Electrical Workmanship & Materials" section 4.19.	In line to achieve this credit. Note previous comments which need to be satisfied at stage F if the credit is to be awarded.		0	1	1												

Trust to provide written commitment that time and budget will be available to fulfill the requirements of the credit.	Simple building users guide will be produced during the commissioning period at the end of Phase 2A construction. These will be based upon O&M manua information.		0	1	1												
Trust's Procurement Policy	There is an environmental policy for trust procurement. However, the policy does not place any requirements on the supply chain such as providing certified services or products, etc. The onus for delivering Environmental procurement should be placed on the supply chain in line with imminent EU legislation and this policy does not undertake to do this.		0	1	1												
Trust - business case - in the financial section - budget Document to be provided which states asset maintenance is in accordance with Estate Code.	Trust to provide evidence of incorporation of asset maintenance agreement.		0	1	1												
			9%	91%	100%												
WSP Metereing schematic showing sub meters. " check (12) Electrical Distribution.pdf" Referance should be provided in business case	As well as providing the schematics WSP should demonstrate how metered data will be used to manage energy consumption of the equipment metered either through the BMS or through a stand alone meter reading M&T package at stage F. Has the budget been provided ? See previous comments.		0	1	1												

WSP - Schematics for departmental metering. The Trust need to put together with WSP a strategy for how the sub metering will be used to manage the energy use throughout the building. Referance should be provided in business case	Each department will be on a different level. Each level is sub-metered and therefore each department is sub-metered. To achieve the credit this information will need to be written in to the output specification and shown in the schematics demonstrating this has been achieved. Has the budget been provided in the business case ? Also see comments above.		0	0	1												
Statement from the Trust that no tenants will be occupying building in the next 5 yrs including retail and catering	To achieve this credit a written statement letter or words included within the output specification will need to be provided at stage F		1	1	1												
WSP -Schematics for heating zones in mechanical schematic drawings. "(13) Primary Heating Schematic.pdf"	In additional to the Schematics the rationale for the heating zones demonstrating that the zoning meets good practice recommendations are required to achieve this credit		0	1	1												
WSP - draft of control strategy See clause 5.3 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	Clause 5.3 does not include a controls strategy		0	0	1												
Section 3 of "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc" "(18) Heat Rejection and Sustainable Sys. Sch.pdf" "(19) Heat Pump Schematic.pdf" (16) Bolier selection.xls	The information provided does not demonstrate that the system is designed to efficiently meet seasonal variation in load as required for this credit . Unless this undertaken assumptions about plant efficiency will be undermined by site performance . Also the trust runs the risk of funding oversized plant which is unable to deliver the performance expected.		0	0	1												
WSP have spreadsheets showing heating systems calcs predict average monthly basis of the loads. Need strategy to demonstrate how the plant has been selected and how it adapts to seasonal loads energy efficiently. Calculations showing plant loads used for selecting boilers																	

Clause 5.19 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	This credit is on track to be achieved. It should be noted that that NEAT was written in 2001 and technology moves on. See previous comments. Typically lighting will account for over 20% of the energy bill for Acute hospitals I would expect more information to be provided on lighting at this stage. See comments below.		0	1	1													
(07) GOSH Phase 2 - Scheme Design-Issue 02.doc Section 5.21	Appendix 5 of Encode referred to in section 5.21 of (07) GOSH Phase 2 - Scheme Design-Issue 02.doc provides specific energy consumption benchmarks. For stage F WSP will need to demonstrate that their lighting design meets these targets. This will impact on the energy consumption model. For the credit to be awarded the controls strategies will need to be demonstrated in drawing or out put specification for all generic areas		0	0	1													
Written commitment to comply with credits WSP. Copy of designing out crime report for external lighting from GTMS	still to be provided		0	1	1													
Provide written commitment to compy with credit - WSP (07) GOSH Phase 2 - Scheme Design-Issue 02.doc Section 5.21	The information required for credit assessment has not been provided.		0	1	1													
WSP provided Section 3 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The information required for credit assessment has not been provided. A decision on heat loss and U value is fundamental to calculating the energy performance		0	0	1													
as above	as above		0	0	0													
	Assumed theis credit will not be achieved		0	0	0													

Carbon calculations and assumptions behind them. See Section 3 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The information provided indicates the likely carbon saving from measures but does not provide an estimated carbon emission figure necessary for awarding any credits. These credits have been estimated on the basis of assurance given in previous meetings. There is no factual evidence provided of carbon target driven design. At stage F this evidence will be required if any credits are to be awarded. If the evidence can not be provided it is unlikely that an Excellent rating can be achieved.		0	11	11												
	This information has been provided verbally but needs to be confirmed		1	1	1												
			1	1	1												
WSP draft strategy for fan pump speeds: See Scheme Design report clause 5.4 to 5.11 Air handling plant. "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	Although variable flow is mentioned the document does not specifically say this shall be achieved by VSD motors. Conversely dampers and valves are mentioned. Currently this credit is not in line to be achieved.		0	0	1												
GTMS - GLA report on energy strategy WSP Stage D Report on free cooling strategy See Scheme Design report clause 5.11 Air handling plant. "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The reference provided does not specifically detail the information necessary for the credit to be awarded.		0	1	1												

CHP feasibility study report - GTMS (38) CHP Appl to GOSH Ph 2-rev02.pdf	The CHP feasibility has been carried out and the credit has been awarded for this assessment. However, the information provided is simplest and light weight , a more rigorous appraisal of CHP opportunities would have been beneficial. The figures and the assumptions are not robust and the paybacks seem overly long for the assumptions made. Grants are now a viable from the Low Carbon Building programme and these could also have been usefully considered.		1	1	1												
Stage D report - WSP See attached boiler specification. (Hovel Boilers) "(15) Hoval Cosmo Boiler range.pdf" (16) Bolier selection.xls	Boilers with a potential seasonal efficiency of 90% are selected therefore credit achieved at this stage. However , there is no information to demonstrate that the boilers will achieve this level of seasonal efficiency or that their sizing or control is optimised . It will be useful to undertake modelling to ensure that the system efficiency is maintained and essential fo quantifying energy risk.		1	1	1												
See section 10 of "(11) Part 4 - Electrical Workmanship & Materials.doc" and clause 5.19 of "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	BMS provision outlined. However, I would have expected to a see detailed performance specification. The BMS will be fundamental to managing the environmental services. There is no reference of commitment to providing training or what this training will cover .		0	1	1												
Ssection 3 of spec "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc" and schematics "(17) AHU Heat Reclaim Schematic.pdf"	What is the energy reclaim rate for the energy recovery systems?. Since this building has a low energy brief and GLA involvement I would expect this to be explicitly stated. The target reclaim figure will significantly impact on the energy performance of the building. If this information can't be provided I would want to know why not.		0	1	1												
	Credit does not apply		0	0	0												
			12%	**83%**	**98%**												
(22) GOSH 2006 Travel Plan_GRB_210906.pdf	Credit achieved		1	1	1												

Statement from Trust showing compliance with Standards for better health - Trust	To be provided by Peter Wollaston, GOSH		1	1	1												
No information required	Credit met		1	1	1												
(23) Drawing SiteX(X)J-rB-J02 A3.pdf show position of cycle parking	175 bike places provided. From the drawing it is not clear whether lockers or bike places are being shown - which needs clarification. To meet credit requirements also need to know how many staff will be using the facilities and details of showers and lockers facilities for cyclists - Graham Mills		0	1	1												
Map of local transport stops are shown in (24) Public Transport.ppt	To meet the requirement of this credit it will be necessary to provide timetables for public transport - see previous comments		1	1	1												
Maps and timetables showing locations of local transport stops - Trust			1	1	1												
			1	1	1												

			1	1	1												
			1	1	1												
Map of pedestrian routes around hospital site	To be provided by Peter Wollaston see earlier comments		1	1	1												
Minutes from meeting with Camden on updating transport policy (09) Steering group notes meeting 9.6.06.doc (26) TP notes 19 Sept 06.doc (27) NCL TP Group notes meeting 16.6.06.doc	Meets credit requirements		1	1	1												

			91%	**100%**	**100%**												
See clause 5.12."(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The reference provided does not provide information on which the credit can be awarded		1	1	1												
See clause 5.19 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	as above		1	1	1												
See clause 5.14 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	If this requirement is met then the credit should be met at stage F		1	1	1												
Outline Specification K50:110 (last page) "(02) GOSH PHASE 2 Outline Spec.pdf"	Reference only refers to prefabricated ensuits and says fittings will be determined in stage E. For the stage F assessment the requirements of this credit need to be set out in full for every fitting.		0	1	1												
L:DY would need to submit a report to achieve this credit and include within the Landscape Strategy Document. The landscape reference is "(03) Landscape Strategy Document.pdf"	This credit is unlikely to be achieved		0	0	0												
See clause 5.14 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	credit is likely to be achieved schematics to be provided at stage F		1	1	1												
Unable to obtain credit	Unable to achieve this credit		0	0	0												
WSP will look into the rainwater run off. Its viability will be fully tested with the landscaping detailed design, once the watering requirements are understood.	This has not been undertaken yet		0	0	1												
See Scheme Design report clause 5.4 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	LTHW and MTHWS systems to be installed therefore credit will be met		1	1	1												
			56%	**67%**	**78%**												

This statement has not been included	This statement is an explicit requirement for the NEAT credit and has not been provided. I understand from the HSE that Asbestos can still be present in new old stock lift brake shoe linings.		0	1	1												
Stage D report WSP structural -	Information to be provided for a stage D. Early decisions on this will be needed if recycled material is to be used in the build, such as sourcing the material and allowing for properties of these materials - all of which will effect fundamental design decisions		0	0	1												
Outline Specification clause 1.04	At stage F an output specification for subcontractors shall be included showing how this will be audited		1	1	1												
As above	see above		1	1	1												
Refer to outline landscape material schedule. Item 42 for bollard lighting and item 46 for intermediate bollards to Ormond Mews in the Landscape Materials Schedule	For the credit to be awarded the door and corridor protection needs to be included as well as building protection. There are no statements defining where the protection is to be provided although some material selection is provided. A wider discussion may be useful including dedicated		0	0	0												
Refer to landscape strategy (last page NEAT checklist Mt 2.6) and Landscape Material Schedule Items 35-39. Materials to include FSC timber and Ttura (80% recycled UK glass in resin, spec. clause M12). The majority of external surfaces will be 'A' rated concrete and stone paving.	Credit requirements will be met.		1	1	1												

	The credit can not be achieved		0	0	0												
External Wall, refer to outline spec. clauses H92 and M21.	This construction type is not included in the green guide. However, natural stone cavity wall construction achieves an A rating		1	1	1												
Internal wall, refer to outline spec. clause K10.	Dry Lined plasterboard partitions on metal studs achieve an A rating		1	1	1												
Intensive and Extensive green inverted roof, refer to outline spec. clauses J42 and Q37.	Green inverted roofs are not covered by the green guide. However, galvanised steel inverted roof achieves an A rating and in-situ reinforced concrete a C rating. The credit can not be awarded until the relative areas are calculated showing 80% of the roo achieves an A rating		0	0	1												
Windows refer to outline spec. clause L10	Aluminium windows achieve a B rating		0	0	0												
Rubber floor covering, refer to outline spec. clause M50.	Synthetic rubber floors achieve a C rating and PVC sheet floors achieve a B Rating		0	0	0												

PQQ document to contain this as a requirement. GTMS written commitment. Need information from enabling works and main phase 2 contracts See attached document section "Environmental Considerations" This document forms part of the Planning Application and its procedures will therefore need to be included in the contract documents.	the requirements of the credit have not been achieved - see previous comments		0	0	0												
			38%	**46%**	**62%**												
Section 5 Land Use of the Sustainability Statement describes the site to be developed	credit achieved		1	1	1												
Section 5 Land Use of the Sustainability Statement describes the site to be developed	credit achieved		1	1	1												
"(06) NEAT LE 2.3 Eco Value Calculator.pdf"	The information included within the ecological calculator indicates a change in ecological diversity o the land use for the development. (Scoring 3 out of 4 credits). Areas checked at stage D, as all roof areas are now extensive green and not brown. For stage F supporting evidence will need to be provided There is current hard landscaping which has not been included within the calculator and this need to be checked		2	3	3												
Refer to Q37 in the "(02) GOSH PHASE 2 Outline Spec.pdf"	Dr. Ken Yeang, the projects design director, is a member of the British Ecological Society. He has driven the landscape strategy document, which includes 'extensive green roofs' to enhance local ecology, which did not previously exist on the island site. This will need to be explicitly stated in the stag F report to achieve the credit		1	0	0												
Under Landscape Objectives and the Ecology section of the report. (03) Landscape Strategy Document.pdf	High quality external spaces to improve the surroundings for patients, staff and visitors will be created using indigenous planting in external spaces to encourage wildlife for the enjoyment of the patients. The stage F report will need to define the spaces and species to achieve the credit.		0	0	1												

Trust to provide drawings or photographs of site prior to redevelopment	The evidence needs to be provided to award this credit		1	1	1												
			0	0	0												
			60%	**60%**	**70%**												
See Scheme Design report clause 5.8 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	Using low ozone depleting refrigerant does not meet the credit requirements		0	0	0												
GTMS to give written commitment on ODP material	not provided		0	1	1												
See Scheme Design report clause 5.8 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	Meets the credit requirements at this stage however there is more information and systems needed for final compliance see previous comments and these should be demonstrated for stage F		1	1	1												
See Scheme Design report clause 5.8 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	A commitment for pump down has been provided but further information required to achieve Credit - see previous comments		0	0	1												
WSP to provide calculations	still to be reviewed		0	0	1												
See Scheme Design report clause 5.37 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The requirements of the credit are likely to be met		1	1	1												
See attached boiler specification. (Hovel Boilers) "(15) Hoval Cosmo Boiler range.pdf"	The information provided does not identify the Nox emissions required for this credit to be awarded. BRE were led to believe that this credit would be achieved for stage F hard evidence will need to be provided		1	1	1												

See attached boiler specification. (Hovel Boilers) "(15) Hoval Cosmo Boiler range.pdf"	The information provided does not identify the Nox Emissions required for this credit to be awarded. BRE were led to believe that this credit would be achieved		1	1	1												
See attached boiler specification. (Hovel Boilers) "(15) Hoval Cosmo Boiler range.pdf"	The information provided does not identify the Nox Emissions required for this credit to be awarded.		0	0	1												
GTMS to provide list or reference within stage D report (36) Red Amber Green plus Deliterious Materials.doc	The reference provides information likely to achieve the credit		1	1	1												
GTMS to provide list or reference within stage D report (36) Red Amber Green plus Deliterious Materials.doc	A List needs to be prepared for stage F		0	0	1												
Noise assessment completed. Report attached. (34) Acoustic Survey Report.pdf	Credit requirement met at this stage as te survey has been carried out. For the credit to be maintained the acoustic performance defined in the report will need to be demonstrated		0	0	0												
			42%	**50%**	**83%**												
not provided	At this stage a commitment to achieve the requirements should have been provided. This information is also fundamental to achieving the energy targets. References to documents/ drawings used to calculate floor areas and area of opening façade and the calculation outcomes will be required for stage F for the credit to be awarded.		0	1	1												
not provided	At this stage a commitment to achieve the requirements should have been provided. This information is also fundamental to achieving the energy targets. References for documents/ drawings used to calculate floor areas and area of opening façade and the calculation outcomes will be required for stage F for the credit to be awarded.		0	0	0												
Clause 5.11 (07) GOSH Phase 2 - Scheme Design-Issue 02.doc was provided	Credit requirements met at this stage		1	1	1												

Clause 5.11 (07) GOSH Phase 2 - Scheme Design-Issue 02.doc	The information to meet the credit requirements has not been included under the reference given. Se previous comments		0	1	1													
WSP to provide calculations See Scheme Design section 3 for calculation. "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	No information provided. At this stage a commitment to achieve the requirements should have been provided. This information is also fundamental to achieving the energy targets. See previous comments		0	0	1													
	Have T5 and T2 technologies been considered?																	
WSP to provide evidence of optimising blind selection	To be undertaken as part of Detail Design. To get any credit at this stage requires as commitment to optimise blind selection. This could include a budget cost in the business case		0	0	0													
See Scheme Design report clause 5.19 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The provision of HF control gear is not covered in the reference provided		1	1	1													
Acoustics study has been carried out(34) Acoustic Survey Report .pdf	The requirements of the credit have been met		1	1	1													
Trust to provide reference to the business case	Living Plants will form part of the Group 3 / 4 equipment budget. FBC forms to be forwarded to BRE when available - Phil Day		1	1	1													
WSP to provide statement in Stage D report Clause 3.8 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The requirement s of the credit are likely to be met		1	1	1													
WSP to provide statement in Stage D report Clause 3.8 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	The references does not provide sufficient information necessary for this credit to be awarded		0	1	1													
WSP to provide statement in Stage D report Clause 3.8 "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	This statement is not sufficient to achieve the credit. HTM 04-01 Part A covers this and should be implemented		0	1	1													

See section 4.0 Thermal Model."(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	Requirements of Credit are met at this stage. However, the information provided is simplistic. If it is the result of detailed modelling and analysis that is OK , but if it is the result of unsubstantiated assumptions these need to be evaluated thoroughly. A thorough evaluation will be required for the stage F review . see previous comments		1	1	1												
WSP to demonstrate																	
LDY to provide drawings	Information not yet available		0	1	1												
See Scheme Design report clause 5.11 Kitchen Extract. "(07) GOSH Phase 2 - Scheme Design-Issue 02.doc"	Sufficient information for the credit to be awarded has not been provided in the reference provided. Information required on pressure regime		0	1	1												
Not provided	Phase 2 way finding strategy -Peter Wollaston		0	1	1												
Trust Reference in Business Plan	£1.5m is included in the budget for art. FBC cost forms will be forwarded when available - Philip Day		1	1	1												
			41%	**82%**	**88%**												
Trust conservation apointment - (25) CGMS Appointment.pdf	Listed Buildings are on the GOSH site, however do not form part of the redevelopment area. These buildings are therefore not affected. GOSH have employed CGMS to advise on designing with sympathy to the Bloomsbury Conservation Area. To achieve the credit a report or other consultation document will need to be produced.		1	1	1												

Trust to provide Report reference	Graham Mills to provide to gain credit		0	1	1											
(09) Steering group notes meeting 9.6.06.doc (26) TP notes 19 Sept 06.doc (27) NCL TP Group notes meeting 16.6.06.doc	credit requirements met at stage D		1	1	1											
Trust to provide evidence or statement letter	The restaurant will be open to access by the local community. The restaurant will be easily accessible off the main hospital corridor and will be sign posted from within the hospital. For the Credit to be awarded a trust strategy needs to be provided.		0	1	1											
Reference for the consultation process: (27) Comments on Public Exhibition.pdf and (28) Public Exhibition Letter.pdf	A public exhibition was undertaken over the period 31st July 2006 to 3rd September 2006. However, a copy of the consultation document is required to award the credit		1	1	1											
Trust to demonstrate: (02) GOSH PHASE 2 Outline Spec.pdf (07) GOSH Phase 2 - Scheme Design-Issue 02.doc	BRE understands that there was a Public Consultation exercise and these requirements are all being incorporated in to the new building. This is not shown in the reference provided. This information is required to award the credit.		1	1	1											
See slides 69 to 78 of (29) Option Appraisal Worshop.ppt	Out of town has been addressed at OBC stage in an option analysis workshop. But this is not covered in the reference provided.															
			67%	**100%**	**100%**											
Trust policy reference and implementation action plan reference: (30) Environmental Action Plan 2006-07.doc	This reference does not provide sufficient information for the credit to be awarded. There should be a commitment for spaces and specific recycling policies for this credit to be awarded.		0	1	1											
Trust policy reference and implementation action plan reference: (30) Environmental Action Plan 2006-07.doc	This reference does not provide sufficient information for the credit to be awarded. There should be a commitment for spaces and specific recycling policies for this credit to be awarded.		0	1	1											
Trust policy reference and implementation action plan reference: (30) Environmental Action Plan 2006-07.doc	This reference does not provide sufficient information for the credit to be awarded. There should be a commitment for spaces and specific recycling policies for this credit to be awarded.		0	1	1											
LDY to provide drawing references for the storage of recyclables.	This information is required for the credit to be awarded . It would be useful to link this to the waste strategy so spaces and the management of waste is thought through properly		0	0	1											
			0%	**75%**	**100%**											