

Greater Glasgow & Clyde NHS Board

Board Meeting

Paper No.10 /44

26th October 2010

Full Business Case - New South Glasgow Adult and Children's Hospitals

RECOMMENDATION

Board members are asked to receive this paper which details the key points in the Full Business Case (FBC) for the New South Glasgow Hospitals and to approve the Full Business Case. The proposals set out in this document are fully in line with the phased construction contract signed between NHS Greater Glasgow and Clyde and Brookfield Construction UK Limited (BCL) in December 2009.

It is planned to submit the FBC to the Capital Investment Group (CIG) for consideration at their meeting on 9th November 2010.

Copies of the Full Business Case are available on request.

Structure of the document

This document describes the strategic context of the project and the actions undertaken since Outline Business Case approval. The remaining sections outline the scope of the new hospitals, the Stage 2 design work undertaken, expected benefits of the project, governance and contractual arrangements, risk management, financial appraisal, status of planning permission, economic benefits to the local community and the outcome of the recent Gateway Review.

1. Recap on Purpose of the Project

The New South Glasgow Hospitals (consisting of a new adult and new children's hospital), represent the second phase in the Acute Services Review strategy (ASR). The ASR proposes the reduction in the number of acute adult sites from 6 to 3, these being Glasgow Royal Infirmary, the new South Glasgow campus and Gartnavel General Hospital and the development of two ambulatory care hospitals at the Stobhill and Victoria sites.

The strategy is well underway with the first phase, the development of the two Ambulatory Care Hospitals, completed in 2009.

The New South Glasgow Hospitals will achieve the gold standard triple co-location of adult, children's and maternity services and modernise services, facilitating the closure of the Western Infirmary, the Victoria Infirmary, Mansion House, Yorkhill Hospitals and some existing parts of the Southern General Hospital with the transfer of inpatient services to new, state of the art facilities.

The construction of the new hospitals will give the opportunity to redesign the way in which health services are delivered and to reappraise the skills and profile of the workforce to deliver modern health services for the 21st century.

The development also has the potential to breathe new life into South West Glasgow and beyond, generating jobs and commercial opportunities for the local population both during construction and once in operation.

2. OBC Approval

The proposals for a new adult and children's hospitals, new laboratory facility, facilities management and new 33kv electrical sub-station were previously presented to the Scottish Government in an Outline Business Case (OBC) which was approved in May 2008.

Procurement Process

Subsequent to OBC approval in May 2008 the Board commenced a procurement process to contract to design and build the new hospitals and laboratory facility which concluded in October 2009.

The outcome of the procurement was presented to the Board in November 2009. The Board approved the signing of a contract with Brookfield Construction UK Limited which was complete on 18th December 2009. The contract made provision for:-

- Stage 1- construct the new laboratory, the FM facility and the new 33kv electrical substation
- Stage 2 - design the new adult and children's hospitals which will inform the work for the Full Business Case (FBC)

Upon Scottish Government approval of the new adult and children's hospitals FBC, BCL are contracted to complete stages 3 and 3a below

- Stage 3 - construct the new adult and children's hospitals
- Stage 3a - Demolition of the surgical block and associated buildings and completion of the soft landscaping

Timetable

A summary timetable for the project is shown below.

Event	Milestone
Stage 1 commence construction of the Labs project	February 2010
Stage 2 completion, Full Business Case (FBC) approval by Health Board	26 October 2010
FBC considered by Scottish Government Capital Investment group	November 2010
Stage 3 (Construction of adult and children's hospitals) programmed to commence	November 2010
Stage 1 Completion (Construction) - Laboratory Facilities	March 2012
Stage 3 Completion (Construction) – adult and children's hospital	January 2015
Operational Date – adult and children's hospital complete service transfers.	Summer 2015
Stage 3a completion, demolition of surgical block and completion of landscaping	Summer 2016

New Laboratory Build

A Full Business Case for the laboratory and FM component was approved by the Scottish Government on 4th December 2009. Building work commenced in February 2010 and is anticipated to complete on 10th March 2012. The construction work is on schedule and within the project budget with a governance structure, risk management and change control process fully established.

This document therefore addresses the remaining components of the contract which are a new adult hospital and new children's hospital.

The following describes the scope of the new hospitals and the Stage 2 design work undertaken, expected benefits of the project, governance and contractual arrangements, risk management, financial appraisal and outcome of the recent Gateway Review.

3. Scope of the Adult and Children's hospitals

New Adult Hospital

A 1,109 bedded adult new build acute hospital is planned providing A&E services and acute specialist in-patient care, a small volume of medical day cases and out-patient clinics serving the local (South-West Glasgow) population. No day surgery will be undertaken as this will be provided at the new Victoria Hospital.

New Children's Hospital

The proposed new 256 bedded children's hospital will provide A&E services and a comprehensive range of inpatient and day case specialist medical and surgical paediatric services on a local, regional and national basis. The new development will also have outpatient facilities. The Board's strategy is that all Glasgow's children's services (up to the age of 16 and up to 18 years where appropriate) will be provided at the new children's hospital.

4. Anticipated benefits from the project

The project will provide a wide range of benefits some of which have already been mentioned. In brief the new adult and children's hospitals on the southern site will bring together adult, children's and maternity services to provide a triple co-location gold standard service.

The bringing together of inpatient services from the Western Infirmary, the Victoria Infirmary and some existing parts of the Southern General Hospital will allow continued sustainability of clinical services, sustained achievement of working time directives and 'Reshaping the Workforce' and larger specialist teams to be formed with 24/7 patient access to high quality specialist services. The consolidation of 3 sites to 1 will enhance opportunities for teaching and research and strengthen links with the Universities.

The new build will allow critical co-locations between departments and within departments to be addressed and patient pathways to be remodelled producing a more efficient service. This will allow the Board to continue to meet the Government HEAT targets and increased ability to meet future waiting time guarantees for 2015.

The new hospitals will be designed to be fit for purpose and will provide a pleasant healing environment with single rooms and ensuite facilities for the adult hospital and separation of patients, visitors and Facilities Management travel routes. The healing environment will be enhanced through the development of an arts strategy the key strategic elements of which are incorporated into the contract.

The new buildings are designed to address environmental issues in energy consumption and carbon footprint and will provide a good working environment which will enhance staff morale and recruitment and retention. The new builds will also allow innovative solutions for materials management and logistics.

5. Stage 2 Design work undertaken.

The tender documentation set a minimum level of design information required for the Full Business Case, this included development of the departmental layouts (1:200 drawings), the individual rooms layouts (1:50 drawings) and a range of technical aspects such as: facilities management systems, equipment, acoustics, electrical systems, fire strategy, access and security systems, surface finishes and protection and radiation protection,

Pre-contract, over 70 user groups were involved in the development of the schedules of accommodation, clinical output specifications, identification of key critical co-locations and, for the podium specialties, development of exemplar drawings. Following award of the contract the user groups have been working closely with the Project Team and Contractor's architectural team to develop the detailed design of their departments, the following describes this in more detail.

Between January 2010 and June 2010 each user group met 2 or 3 times with the Project Team and Architects to develop the layout of their departments, this involved looking at patient flows through the department and to other departments, flows of clean and dirty goods and critical adjacencies of rooms. The 1:200 drawings were signed off in June by the user groups and a project review by the Project Team and Advisers was completed in August 2010.

In the period June to September 2010 work was undertaken with the user groups in developing the 1:50 typical room drawings. This involved one to two user meetings with each group reviewing, in total, over 700 different room types identifying the equipment, fittings and fixtures, medical gases etc which will be required in each room and their appropriate locations.

Full size mock-ups of an adult bedroom and en-suite, child's bedroom and en-suite with staff touchdown and a critical care space were built to assist users in developing the individual room layouts (1:50 drawings). This has proved to be extremely helpful in progressing the design.

Within the two new hospitals all briefed room sizes follow the building note guidance but the 1:50 process allowed minor adjustments and final check that the room size was fit for function. The information gathered during the 1:50 process was used to confirm the capital equipment costs.

The membership of the user groups include medical, nursing, Allied Health Professions, Facilities Management, Diagnostic and pharmacy staff. In addition the user groups are supported by input from medical physics and IT and, where required, radiological protection officers. It should be noted that infection control have been fully involved in the design with a senior infection control nurse as a full time member of the Project Team attending all the user group meetings.

The new hospitals incorporate state of the art design and equipment with a range of innovative features including the use of automated guided vehicles to provide transportation of catering and supplies around the hospital, advanced Information Technology supporting a paper-lite environment, a roof top helipad, a high tech Building Management System, in-built resilience and a range of low to zero carbon technologies.

6. Governance Arrangements

The project has demonstrated and followed good management processes and has robust risk management and governance structures in place. The governance structure continues to be reviewed and reconfigured in response to the changing needs of the project through each different stage. There is a strict change control mechanism in place, the success of which is demonstrated by the cost of the project remaining stable since contract award in December 2009. The project is subject to regular external audit and there is close liaison with the Scottish Government regarding direction and progress of the project.

7. Risk Management

Risk Management has been, and remains, a primary focus in the management of the Project.

From the outset of the procurement process the Project Team have completed a Risk Register of the Boards risks and this will be continually maintained throughout the life of the Project. The risk register is reported to the Acute Services Redesign Group each month.

In developing all aspects of planning the new facilities the Project Team and advisors have pro-actively managed potential risks by early identification and action to ensure maximum reduction and mitigation of risk. This approach has been enacted at all key stages of the project including pre-procurement, during procurement and post procurement and has included actions such as market sounding, consultation with key organisations, community engagement, robust control of change and ensuring the site to be handed over to the contractor is clear with known ground conditions.

As part of the contract agreement with BCL the Board and the Contractor each have an agreed risk allocation. Risk is jointly managed between the Board and BCL with regular formal reviews pre-planned, and weekly reviews undertaken to proactively manage identified and new risks.

8. Contract Arrangements

The contract between The NHS Greater Glasgow and Clyde and BCL is in accordance with NEC3 Conditions of Contract Option C Target Price. This means that there is collaborative working between the Board and BCL in taking the project forward

In recognition that the Contractor has formally committed to contract for the Design & Build of the Hospitals at a relatively early stage in the design life cycle, the Contract has been varied to introduce the principal of shared risk within a Target and Maximum Price threshold. This means that if outturn costs are less than the Target the Board and Contractor share in any savings at pre agreed ratios. Where outturn costs are above Target then there is a share of the overrun costs at pre agreed ratios and should outturn costs exceed the Maximum Price then any liability for the Board to make further payments stop, and the Contractor absorbs 100% of the overrun.

The sharing of risks or risk allocation in the contract agreement was agreed during the competitive dialogue process by the Commercial Group, (this group are part of the governance structure for the project).

A number of key contract risks have already been mitigated through work undertaken over the past months, these include the following:

- 1:200 process now concluded
- Development of the 1:50 typical rooms types has also been concluded
- Master Planning Approval given with section 75 costs agreed.
- Scottish Ambulance Service and Scottish Water land purchase costs agreed and on programme for transfer.
- A comprehensive set of design deliverables have been completed during Stage 2.
- The recent rise in VAT to 20% has been accounted for within the current budget
- Demolition to clear the site for the new hospitals is on programme and budget

Of the residual contract risks the key risks which lie with the Board are:

- The finalisation of the 1:50 room layout and equipment
- The helipad relocation
- Inflation risk above 2.5% per annum over the contract duration

As stated above, these are monitored on a regular basis.

9. Economic Appraisal

In order to ensure that the project continues to provide the Board with optimum value for money the original options considered at the Outline Business Case were reconsidered and it was confirmed that the proposal for new Adult and Children's Hospitals at the Southern General Campus, with the retention of some existing buildings e.g. Neurosciences and Maternity, remains the preferred option.

The OBC also considered three potential procurement routes, i.e. traditional procurement, Private Finance Initiative (PFI) and Not for Profit Distribution Model (NPD). The NPD model provides for the redistribution to the Board of any excess profit which may arise in the form of a "charitable surplus".

In conjunction with the Board's Financial Advisors the three procurement routes were retested and it was confirmed that the traditional procurement route continued to deliver substantially better value for money than both the PFI and NPD options.

10. Financial Appraisal

As part of finalising the FBC an exercise was undertaken to recalculate both the capital and revenue consequences of the New South Glasgow Adult and Children's Hospitals to ensure that the preferred solution continues to be affordable in both capital and revenue terms.

The original contract value agreed with the preferred bidder in December 2009 for the construction of the Hospitals was confirmed as being within the overall affordability envelope. Since contract award, strict change control procedures have ensured minimal change to this contract value. The aggregate of the contract value at October 2010, and all other associated costs including equipment, fees, other non-works costs, Value Added Tax (at the 20% rate applicable from January 2011) and a reasonable provision for quantified risk agreed in conjunction with professional advisors, remain within the overall capital budget for the project.

The impact the project will have on the Board's revenue position has also been revisited during the preparation of the FBC.

The updated cost estimates confirm that by proceeding with the project, the Board is forecasting the achievement of a net revenue saving of £18m. This saving arises partly due to a reduction in Capital Charges to be incurred on the new Hospitals and partly through service savings.

11. Planning Consent

Outline Planning consent was granted in July 2009, based upon the exemplar scheme and subject to 43 conditions and a Section 75 Agreement for off site works.

Between February and September 2010 workshops were held with Glasgow City Council Department Regeneration Services (DRS) and relevant stakeholders to develop the design in 4 key areas, these being – architectural, landscape, transportation and roads/drainage.

In June 2010 planning consent was granted for the Masterplan Matters Specified in Conditions (MSC) application, based on the BCL scheme.

Architectural and other pre-start MSC application was submitted in July 2010. As only one objection was raised the Planning Consent will be dealt with under delegated powers by officers without reference to their Planning Committee. Approval is expected in October 2010.

12. Community Economic Benefits

In order to realise potential regeneration opportunities to South West Glasgow and beyond targets were set in the contract to support local recruitment and small /Medium Enterprises (SME') and Social Enterprises (SE).

In brief 10% of recruits are to be new entrants and BCL are working in partnership with Glasgow South West Regeneration Agency and Glasgow City Council training and supporting local businesses to tender for work on the project.

13. Outcome of Gateway 3

A Gateway 3 Review was undertaken by the Office of Government and Commerce Gateway Review Team between 4th-6th October 2010. The project was awarded a green level of Delivery Confidence Assessment, defined as: “successful delivery of the project/programme to time cost and quality appears highly likely and there are no major outstanding issues at this stage that appear to threaten delivery significantly”.

The Gateway report is very positive and recommends that the project should develop a case study of the procurement approach (so this could be shared with other NHS and Government organisations). There are two actions highlighted to be completed before the next Gateway Review and these are to add some indirect risks (e.g. political risks) to the risk register and continue to develop the benefits management plan to define targets and gather baseline data.

14. Recommendation

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