

Redevelopment of the Newcastle Hospitals (Newcastle Strategic Review)



The strategic direction of the Trust was determined by the outcome of a Review (NSR) in Autumn 1993 of the future of the hospital based healthcare services in Newcastle upon Tyne. The NSR was facilitated by the local Health Authority, working in partnership with neighbouring Health Authorities and the then three Newcastle based NHS Trusts and was the subject of full public consultation.

- The Freeman Hospital to continue as a regional tertiary care centre, with the addition of Renal and Dialysis Services and the relocation of the Northern Centre for Cancer Treatment (NCCT) into a new purpose built facility.
- The Royal Victoria Infirmary to be redeveloped and refurbished to enable the remaining acute services at Newcastle General Hospital (NGH) to be relocated.
- The NGH campus to be cleared of acute services, to allow further healthcare development, as well as a mixed economy approach to the frontline of the site as part of Newcastle City Council "Going for Growth" regeneration strategy for the west end of the Newcastle.

Progress Achieved


Significant progress can be advised of Enabling schemes which have government funding of over £17 million (at current prices) and which are nearing completion.

The major capital developments at the RVI and Freeman are being procured via the government's Private Finance Initiative (PFI). A preferred bidder – Equion plc – was identified in March 2003. Equion plc is a consortium comprising Laing O'Rourke Northern Limited, a construction company; and M+W Zander UK Limited, an estates facilities management company.

The Trust has been delighted to receive support from the local Strategic Health Authority and Primary Care Organisations to progress the design for a fully integrated children's hospital on the RVI site. As part of their bid Equion had submitted a variant proposal (Option B) which re-provided all children's services in new build accommodation instead of it remaining in old and outdated Edwardian accommodation. Dermatology services would also be integrated into new build accommodation. The Trust and Equion recognise that the NSR scheme is in essence just another phase of the overall development of clinical services on the RVI site and Option B enables the 'future proofing' of the site for further change. The Trust will work with Equion to develop the proposals in detail and demonstrate the benefits of this option.



Architects vision for new children's wing

 Equion



The complexity of the RVI redevelopment programme led the Trust to develop a parallel business case seeking funding for a package of "Enabling" measures. The overall objective was to enable the demolition of a substantial footprint of space on the RVI site, to make a cleared site available for the major new build required to accommodate the clinical services which are to relocate from NGH.

Completion of these Enabling works ahead of the major site redevelopment yields significant time and cost advantages to the main contract, by allowing Equion plc to start on the new build as soon as the contract is signed.



The following schemes were pivotal, ie

- Consolidation of the **Haematology Laboratories** into the Medical School commenced in January 2002 and completed to programme in April 2003, at a cost of £4.1 million (including additional funding from the Trust's block capital allocation).
- The old orthopaedic block demolitions completed in late May 2002.
- The **Pharmacy Manufacturing & Stores** scheme which is due to open in September 2003. Total cost of the project is £8.6 million.
- **Antenatal Clinic** together with enhanced supporting infrastructure. Extensive modifications to Women's Services including new build with a phased occupation of the finished scheme culminating in June 2003. The overall scheme cost £5.7 million.
- There will be a series of demolitions in late 2003 which will further clear the centre core of the RVI site in readiness for the major site redevelopment.



Haematology Laboratories
Main contractor Sir Robert McAlpine



Antenatal Services Department



Pharmacy Manufacturing & Stores

The PFI Process

The Outline Business Cases were approved in June 2001, allowing the project to be launched via the Private Finance Initiative in July, with the placing of an advert in the Official Journal of the European Union.

The advert invited private sector consortia to submit 'Expressions of Interest' not only to develop the capital schemes but also to run the estate for a 30 year contract and to provide the funding to support it. Seven companies expressed an interest in the scheme and six qualified to receive the Preliminary Invitation To Negotiate (PITN) in October 2001. Responses to the invitation, the first of two tender stages, were received in February 2002 and following a detailed evaluation period, three were selected to move forward to the next stage, to develop their proposals in detail. The three bidders were Equion plc, Isis Healthcare (AMEC Construction, with W S Atkins Investments), and Summit Healthcare (Sir Robert McAlpine). The Final Invitation to Negotiate (FITN) was issued on 22nd April 2002 and initial priced bids were received on 13th September 2002.

Following preliminary evaluation, the Summit Healthcare bid was excluded from further consideration and Equion and Isis were asked to resubmit proposals. Final submissions were received in January 2003. Further detailed analysis led the Trust to appoint Equion plc as the preferred bidder for the project. Negotiations are well underway and financial close is envisaged by no later than March 2004.

The programme for the remainder of the process being:-

- **October 2003** Full Business Case (FBC) submission.

- **March 2004** At this stage the Trust should have received FBC approval from the Department of Health and HM Treasury and contracts will then be signed with Equion plc.
- **April 2004** Construction works start on site.
- **2006/07** Completion of Freeman development.
- **2007/08** Completion of RVI development.

Prior to entering into the final agreement with Equion plc the Trust will robustly test the PFI proposals against a Public Sector Comparator (i.e. a scheme that would otherwise have been procured with government funding) to ensure that best value for money is achieved in the public interest.

Of late the Trust has seen unparalleled expansion of the services it delivers to address national standards and targets. At the same time, the NHS has introduced new building standards to reflect the needs of the consumer – the patients. Both of these factors have driven the scale of the NSR project to grow significantly. As a consequence, the major capital schemes will now cost in excess of £210 million in capital terms.

The Trust's preferred bidder Equion draws on the experience of Laing O'Rourke (the building contractor) and Anshen Dyer Associates (the architects) both of whom worked on the new Norfolk and Norwich University Hospital, which was one of the first PFI schemes to be completed. The Equion design solutions for both the RVI and the Freeman Hospital have won the support of the clinical staff who formed part of the evaluation process and these designs are now progressing with further staff consultation and public involvement.

Further details of the Projects are found on the following pages.



Royal Victoria Infirmary

The RVI schemes broadly comprise:

- a redevelopment to enable the remaining acute services at NGH to be accommodated on this site. The redevelopment will provide the optimum facilities for clinical excellence and modern treatment techniques. This is particularly so for Children's Services. The new build will be focused around a new Accident & Emergency Department, with all of the vital clinical supporting services accommodated together, for example Traumatic Orthopaedics, Neurosciences, Diagnostic Imaging and Critical Care. The new facilities will also re-house Infectious Diseases Services currently located at NGH.

The RVI has evolved over the last 100 years from the development of the Victoria Wing in 1906, to the completion of the Claremont Wing (Eye Hospital) in 1996. In considering their design proposals Equion have been keen to develop proposals that would reflect the longer term needs of Newcastle as a regional centre and not just focus on yet another set of buildings on the site. Hence they have developed ideas around the rationalisation of the whole RVI campus.

Two proposals for the site were submitted. *Option A* reflected the work undertaken initially by the Trust. *Option B* was an alternative proposal based upon a greater amount of new build in contrast to the refurbishment of the Edwardian accommodation.

Option A

Option A mirrors the design developed in the early stages by the Trust, by building a large six storey clinical block in the land vacated by the enabling schemes. The concept for the new building comprises two separate structures linked by a linear open space. The northerly structure provides the high tech departments such as Theatres, Radiology, Laboratories, and Critical Care. The southerly block takes advantage of extensive natural light and provides the majority of the ward and outpatient functions.

The space formed between these blocks provides a source of natural light and ventilation along the long axis through the centre of the complex. This space is part internal, in the form of an atrium, and part external, in the form of courtyards. Surrounding both of these spaces are circulation galleries which will give easy access to all departments and with an ease of wayfinding not currently prevalent on this hospital site.



RVI site plan



view from Queen Victoria Road



The *Option A* scheme retains a number of Edwardian buildings in close adjacency to the Grade II listed Peacock Hall building. Some Children's and Dermatology services would be retained in these buildings and with links to the new clinical block.

Option B

Recognising that the PFI contract would be for a 30 year period or more and that inevitably there would be significant further changes in healthcare provision and delivery, Equion further developed their proposals to **'future proof'** the RVI site. Acknowledging that any work needed on the existing buildings (of

varying vintages, quality and standards of functionality) would in effect be 'sunk' costs, the opportunity was taken to explore further value for money solutions. This option became known as *Option B*.

The planning principles that were established in the *Option A* scheme are extended into *Option B*. A new main entrance is formed that will effectively separate the adult block from the children's block. This will give the children's part of the hospital a completely separate identity. The site plan on completion of *Option B* demonstrates how future development on the site can be achieved.

- 'A' is similar to the Trust 'Public Sector Comparator' non PFI proposals
- 'B' is the integrated Children's Hospital
- 'C' shows how the site can expand in future years although it should be noted that there are no firm plans at this stage
- 'D' is a landscaped boulevard that runs through the site.



Long term proposals for the RVI site

Freeman Hospital



The Freeman scheme broadly comprises:

- Relocation of Renal and Dialysis Services from the RVI and within the Freeman site to purpose-built new accommodation at Freeman Hospital. The current facilities are not expected to meet future clinical standards and already fall short of forecast demand and therefore it is vital that provision is made for these services.
- Relocation of the Northern Centre for Cancer Treatment (NCCT) from the NGH to a purpose-built centre at Freeman Hospital. This move is particularly vital because the relocation of acute services at NGH would leave the present NCCT clinically isolated.
- Provision of a new 810-space Multi Storey Car Park to reprove the spaces lost in the construction of the building and to reduce the congestion on the site.

The proposed NCCT and Renal Centres have been designed as one building, linked to the existing hospital corridor network at the eastern end of the site. The two parts of the building have been designed to be distinct and are linked by a central and spacious concourse which bisects the two.

The NCCT has been designed around an open courtyard, with the main vertical circulation linking all departments from the entrance concourse adjacent to the main reception

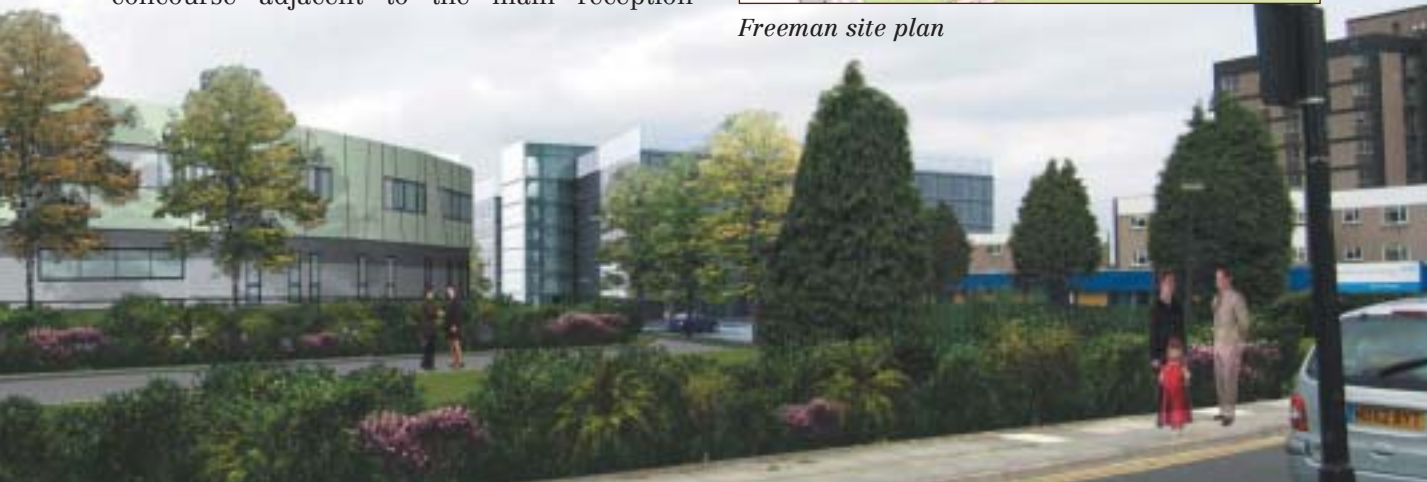
point. The Renal Centre has also been designed around a smaller courtyard and with a distinctive plan form which provides treatment areas for both inpatients and day patients.

The Multi Storey Car Park will be a significant structure which is located close to the new main entrance. Consequently a large number of patients, staff and visitors will access the Freeman Hospital via the new central atrium.

The images give a flavour of the design solutions which are nearing completion in the run up to financial close.



Freeman site plan



View of Renal Centre and Car Park from Melville Grove

New delivery for maternity service

Opening: Jonathan Edwards and Paul Hilton, Clinical Director of Women's Services, at the new Antenatal Services Department, Royal Victoria Infirmary



Yet not that long ago....

