Brighton and Sussex University Hospitals NHS Trust

3Ts Hospital Redevelopment
Teaching • Trauma • Tertiary care

Minutes of the Hospital Liaison Group Meeting
Held on Monday 7th March 2011 (7pm to 9pm) in the Audrey Emerton Building, Royal Sussex County Hospital, Brighton

Present:
Cllr Gill Mitchell, Mrs Jackie Nowell (Vice-Chair), Cllr Craig Turton (Chair), 31 members of the public

Brighton & Sussex University Hospitals:
Steve Gallagher, Operational Director, Estates & Facilities
Nick Groves, AD, 3Ts Service Modernisation

Laing O'Rourke Supply Chain:
Neil Cadenhead, BDP Architects
Steve Chudley, LO'R
Andy Watson, BDP Architects
Simon Zelestis, BDP Architects

Apologies:
Duane Passman, Director of 3Ts, Estates & Facilities

1. **Welcome**
Cllr Turton welcomed everyone to the meeting. He explained that Duane was ill and gave his apologies.

2. **Minutes of the Last Meeting**
The minutes of the last meeting (7th February 2011) were agreed.

3. **Terms of Reference & Conduct**
Jackie noted that the HLG had been reconvened in November 2009. She explained that as set out in the Terms of Reference[1], its purpose is to (i) keep local residents informed about the emerging plans and timescales, (ii) provide a forum for the Trust and design team to seek residents' views on the designs, and (iii) work collaboratively to minimise the impact of the demolition and construction on local residents.

Jackie felt that over the course of the 16 months the Trust/design team has taken on board a number of residents' comments and suggestions. She noted however that the HLG is not a decision-making body (eg. does not have a quorum or other formal governance arrangements) and that there are other fora and processes for residents to express their views formally.

Jackie felt that in light of the tenor of discussions at the previous meeting, it was timely to remind everyone that they are expected to behave towards one another with courtesy and respect, as set out in the Terms of Reference. This would make for a more effective meeting.

1 http://www.bsuh.nhs.uk/about-us/hospital-redevelopment/hospital-liaison-group/?assetdetesctl5849799=346882

4. **Matters Arising**

4.1 **Transport Modelling & Parking Issues**
Nick confirmed that Duane had raised residents' concerns and suggestions in his ongoing dialogue with City Council officers about these issues.

A resident asked when these ongoing discussions would be brought to some conclusion. Cllr Turton reported that he had met Martin Randall (Assistant Director, Development, Planning & Public Protection, Brighton & Hove City Council) to express his dissatisfaction at the delays in the Council's transport modelling and in agreeing the construction route.

4.2 **Rationale for Inclusion of Services in the Redevelopment**
Nick reported that this paper had been drafted and would be shared with the HLG once it had been discussed with the City Council.

4.3 **Architectural Cross-Section**
Neil reported that the design team had had discussions with the Chair of the Conservation Advisory Group (CAG). The detailed cross-section requested is not yet available but will be provided by the April meeting.

Action: Neil / BDP

4.4 **Health Impact Assessment**
A resident asked whether the issues of air ambulance noise and traffic/parking had yet been addressed in the Health Impact Assessment (HIA).

Nick replied that the Environmental Impact Assessment will include noise modelling from all sources, including from the air ambulance. The HIA will then assess these levels against the thresholds identified in the literature as having potential health impacts, and this will be included in subsequent iterations of the HIA.

Nick also noted that as explained at the previous meeting, the HIA has used the Trust's Traffic Impact Assessment and has drawn on the City Council's *Full Local Transport Plan 2006/7 to 2010/11*. It will be updated as further modelling is undertaken.

Cllr Turton added that the resident is also welcome to write formally to the City Council as part of the planning application process to express his concerns.

4.5 **Asbestos**
Post-meeting note. Buildings in which there is some asbestos:-

Stage 1 Demolition: ENT Building (part demolition), Estates Building, Jubilee Building, Latilla Building and Latilla Annexe, Nuclear Medicine Building.
Stage 2 Demolition: Barry Building.
Stage 3 Demolition: Sussex Cancer Centre.

Health & Safety legislation prescribes how asbestos needs to be encapsulated, removed and disposed of.

5. **Design Update**
Neil presented the latest designs *[posted on the HLG website[2]]* and design options, which continue to evolve in discussion with the City Council and other stakeholders. He reported that the internal plans have now been agreed with the majority of clinical users. He noted that discussions with the City Council have focused principally on three areas: the Eastern Road approach, the visual impact of the Stage 1 building and the location/visual impact of the helipad for the air ambulance. He described the key changes and points from the previous iteration:

[2] http://www.bsuh.nhs.uk/about-us/hospital-redevelopment/hospital-liaison-group/?assetdetesctl5849799=348721

Eastern Road Approach

- The building pedestal (ground floor) has been elongated and now extends to the eastern edge of the site (formerly the 'pocket park'). This is for two reasons: to conceal the entrance to the underground parking and to provide greater architectural continuity with the four terraced houses on Eastern Road on the opposite side of Bristol Gate.

- The architectural treatment of the pedestal has been simplified to try to create a building that sits more sympathetically in its local environment.

- For the vehicle drop-off in front of the building, the City Council's preference is for a lay-by rather than a side road. This has been incorporated into the latest designs.

- There are new options for the façade of the Stage 2 building that try to provide a more natural fit with Paston Place, including designs that seek to echo the design of 1930s sanatoria.

Visual Impact

- Work has been undertaken to reduce the visual impact of the Stage 1 building, which does not now have the 'gull wings' that had been a feature of the previous iteration.

Air Ambulance Helipad

- Neil noted that much of the work has focused on the location of the air ambulance helipad and whether this should be on the Stage 1 building or Thomas Kemp Tower (TKT). He explained the considerable engineering challenges and additional cost of the latter; the TKT would need to be strengthened externally and have significant internal work undertaken as well as new lifts, a new fire strategy etc.

Cllr Turton thanked Neil for the presentation and invited questions:-

5.1 **Helipad Design & Location**

5.1.1 **Thomas Kemp Tower Option**

A resident asked whether it is feasible to put the helipad on the TKT.

Neil explained that the TKT was not designed to support a helipad so would need extensive and costly strengthening internally, eg. with a supporting steel frame around the columns. Assessing the feasibility of this option is more challenging because detailed records of the previous engineering calculations do not exist and the necessary intrusive internal survey work may require a decanting or temporary closure of the clinical services currently in that building, which include the Special Care Baby Unit and Intensive Care Unit. The TKT is also not freestanding; its podium extends into buildings on three sides, all of which would require reinforcement.

Neil felt that although this option appears technically feasible, it would be add cost, would be disruptive and would require resolution of a number of engineering uncertainties that could not be quantified until the work was underway.

5.1.2 **Helipad Safety**

A resident asked about the safety of landing air ambulances on the helipad in local weather conditions.

Neil replied that rooftop helipads are not uncommon. There are internationally-agreed design standards and the Civil Aviation Authority monitors outcomes to inform ongoing licensing of sites. The Kent, Surrey & Sussex Air Ambulance and Air-Sea Rescue (HM Coastguard) have also both been involved in discussions about the design and location.

He was confident, therefore, that while nothing is completely free of risk, the air ambulance helipad would be as safe as it could possibly be.

5.1.3 **Landing Protocol**

A resident asked how long it takes an air ambulance to drop off a patient and whether the aircraft keeps its engine running and blades rotating throughout.

Post-meeting note. Leigh Curtis (Director of Operations for Kent, Surrey & Sussex Air Ambulance) replies: 'The time it takes to drop off a patient can be quite variable and is dependant on a number of factors including patient need and hospital logistics, but we aim for 20 minutes. However we never load or unload with rotors running so within a minute of landing the engines will be stopped and will only be re-started when ready to depart. The take-off procedure requires a period of ground running first; the engines will therefore be started approximately two to three minutes prior to take off.'

Cllr Turton noted that the Trust's current estimate is one air ambulance take-off/landing per week. He added that with the police helicopter it is the hovering that causes the most disruption.

5.1.4 **Helipad Use**

A resident asked whether the helipad would be solely for hospital use. Cllr Turton said that this was his understanding; the helipad would be used by the air ambulance to transport hospital patients.

5.1.5 **Helipad Height**

A resident asked whether the helipad could be lower.

Steve Chudley replied that the design team has investigated c. 17 locations around the site, including immediately in front of A&E. Each location has been assessed in detail for wind turbulence using fluid dynamics modelling; this found that for any location the helipad would need to be at or above the height of the tallest building on site (ie. the Thomas Kemp Tower) to avoid turbulence caused by local buildings and the natural turbulence of sea winds.

5.1.6 **Need for Helipad**

A resident asked whether there was a national requirement for hospital redevelopments or Major Trauma Centres to have a helipad for air ambulances.

Nick replied that the Royal College of Surgeons and British Orthopaedic Association[3] state that 'a helicopter pad close to the A&E department is mandatory. There should be no additional secondary journey by road. The helicopter landing site should allow landing throughout the 24 hours.' The NHS Clinical Advisory Group's report, *Regional Networks for Major Trauma*[4], does not specify that all Major Trauma Centres must have a helipad, however it recognises that 'helicopter delivery might be the optimal solution to wider geographical coverage', as is the case for the South East Coast area.

Nick noted that the Royal Sussex County Hospital will be the only Major Trauma Centre in Kent, Surrey and Sussex. Its clinical advice is that an integral helipad is required to enable the Major Trauma Centre to function optimally. *[See Appendix A for briefing note from the Trust's Chief of Trauma]*. Cllr Turton added that previous meetings had discussed the clinical imperative to rapidly transfer the major trauma patient to resuscitation/surgery without secondary transfer by road ambulance, as is currently the case with landing in East Brighton park.

[3] http://www.rcseng.ac.uk/publications/docs/severely_injured.html

[4] http://www.excellence.eastmidlands.nhs.uk/welcome/improving-care/emergency-urgent-care/major-trauma/nhs-clinical-advisory-group/

5.1.7 **Cost-Benefit Analysis**

A resident asked about the cost of the helipad relative to the number of lives it would save. He suggested that the Trust undertake a value-for-money assessment using the National Institute for Health & Clinical Excellence (NICE) methodology for appraising new drugs[5]. Another resident asked how much the helipad would cost.

Steve Chudley replied that the costs of the helipad options are currently being calculated and that it would be misleading to provide any estimate until this work is complete.

Nick replied that he was not aware of any research comparing the outcomes of major trauma patients arriving by air ambulance versus those arriving by road ambulance. However, the incidence of trauma is particularly high in the younger population: an average of 36 years are lost per trauma death[6]. This is likely to skew the cost-benefit in favour of the helipad.

5.1.8 **Need for Major Trauma Centre**

A resident asked whether the Trust is required to be a Major Trauma Centre or whether this is an aspiration.

Nick replied that the NHS is committed to establishing regional Major Trauma Centres because of the strong evidence nationally and internationally that they significantly improve patient survival (by 20-25%) and reduce long-term disability. Major Trauma Centres are required to have the full range of specialist clinical services available, including neurosurgery. NHS South East Coast (the Strategic Health Authority) committed to establishing the Royal Sussex County Hospital as its Major Trauma Centre in 2008[7]. The Royal Sussex County is the only hospital in Kent, Surrey and Sussex that has the required range of services available.

Nick explained that if the Royal Sussex County Hospital were not a Major Trauma Centre, these patients would need to be taken to Southampton or London. This would involve both delays in treatment and considerable travelling for relatives. In this scenario it is also unlikely that Sussex would retain its neurosurgery service, so the 1.5m population currently served by Hurstwood Park would also need to travel outside the region for treatment. This is not considered acceptable by the Primary Care Trusts responsible for commissioning services for the local population.

5.1.9 **Major Trauma Centre Accommodation**

A resident asked how much of the building relates to the Major Trauma Centre. Nick agreed to add this information to the minutes.

Post-meeting note. The Major Trauma Centre accommodation represents 2% of the 3Ts redevelopment:

Accommodation	*Area (net m^2)*	*%*
Major Trauma Theatre	*170*	*0.4*
Major Trauma Ward	*561*	*1.5*
Total	*731*	*2.0*

5.1.10 **Helipad Designs**

Cllr Turton and a number of residents felt that the height/visual intrusiveness and proposed design of the helipad on the Stage 1 building was unacceptable. A number of residents also found the design of the helipad on the Thomas Kemp Tower unacceptable and were concerned about the view from Lewes Crescent.

5 http://www.nice.org.uk/newsroom/features/measuringeffectivenessandcosteffectivenessthegaly.jsp
6 http://www.ncepod.org.uk/2007report2/Downloads/SIP_report.pdf
7 http://www.southeastcoastfff.nhs.uk/hpec/index.asp

Cllr Mitchell said she supported the need for Brighton & Hove and the wider region to have better hospital buildings and felt that the public would accept the demolition of the Barry Building. She thought local residents had been very tolerant of the previous hospital building projects but felt that the helipad designs are a step too far. She did not think they would be acceptable to the City Council's Planning Committee.

The Chair of the CAG felt that putting the helipad on the roof of either the Stage 1 building or the TKT would be irresolvable: a design that is high enough to work operationally will not be acceptable as a design. Instead, he suggested that the Trust buy the St Mary's Hall Junior School site, build on that, put a helipad on the roof, and build a link bridge/travelator across Bristol Gate to the main hospital to link in with the theatres on Level 5.

He added that he wanted to see a wonderful hospital redevelopment but feels that too much priority has been given to clinical planning over heritage and townscape issues. Another resident felt that it was not helpful to present heritage and clinical needs as a dichotomy; the scheme needs to address both.

Cllr Turton asked the Chair of CAG to write Duane an open letter (to be posted on the HLG website) with this proposal and for the Trust formally to reply.

Action: Chair of the CAG / Duane

5.2 **Hospital Location**

A resident felt that the redevelopment would spoil the local topography. He asked whether the plans were a fait accompli or whether the hospital be relocated to somewhere less densely populated.

Cllr Turton summarised the history that led to the decision in the 1990s, following public consultation, to retain the hospital in its current location. He felt that there was widespread public support for having first rate local and specialist hospital services and buildings for the population of Brighton & Hove and the wider region. He commended the Trust for making significant changes to the design in response to local residents' views, which it had been under no obligation to do. He also noted that the increase in patient attendances, eg. by moving the Regional Centre for Neurosciences from the Princess Royal Hospital to Brighton, would be largely offset by the PCT's plans to move Outpatient services into GP premises and other community settings.

Cllr Turton said that the redevelopment is difficult a balancing act between disruption to local residents during the period of demolition and construction, the visual impact of the redevelopment on the local environment, and the benefits for the city and region of significantly improved healthcare services. This will need to be adjudicated by the City Council Planning Committee and is not a fait accompli.

5.3 **Value for Money**

A resident asked whether the approval process includes a value-for-money assessment. Cllr Turton replied that to get to this stage the scheme has had to be reviewed by the local Primary Care Trusts, Strategic Health Authority, Department of Health and Treasury and that this includes a value-for-money assessment.

The resident suggested that if 71% of the capital costs are like-for-like replacement of existing facilities, this does not represent value-for-money. Cllr Turton explained that this figure includes replacing existing accommodation, such as the pre-Nightingale medical and elderly care wards in the Barry Building, to modern space standards.

5.4 **General Progress**

A resident said that after 16 months of meetings he felt no sense of progress. Some of the design changes are improvements; others, such as the new helipad designs, are bombshells. He wondered whether real progress is being made.

Cllr Turton replied that the designs, construction logistics and internal clinical plans are progressing but that this is an iterative process that seeks to reconcile the views of local residents, the City Council planning officers and local and national heritage conservation societies as well as produce a building that works clinically and provides a first-rate service for patients.

He was confident, therefore, that progress is being made but he appreciated that the Trust did not want to submit its planning application until they had a reasonable level of confidence that the plans would receive support.

5.5 **Distance from Eastern Road**

A resident asked whether in the latest design iterations the Stage 1 building had moved closer to the Eastern Road footpath. Neil confirmed that it had not.

Cllr Turton thanked Neil for his presentation.

6. **Construction Logistics Update**

Steve Chudley gave an update on the construction logistics *[posted on the HLG website*[8]*]*, including site investigation, pre-demolition audit, construction traffic and vehicle movements, site access and local labour/migratory workforce.

Cllr Turton invited questions:-

6.1 **Construction Route**

Cllr Turton asked whether the route for construction traffic had been agreed. Steve replied that it has not and that this is subject to ongoing discussions with the City Council planners.

Cllr Mitchell asked whether the routes used for the previous developments on the hospital site had been reviewed. Steve replied that discussions with the City planners had suggested the route that he had presented to the December HLG meeting[9] and LO'R had therefore undertaken more detailed analysis to test this option. However subsequent discussions have suggested that the planners may want to amend the route; their feedback is awaited.

6.2 **Consolidation Centre**

Cllr Turton asked whether potential locations for the Consolidation Centre could yet be shared with the HLG. Steve replied that options are under consideration but that until the proposed construction route is finalised these discussions cannot be taken forward.

A resident suggested that whatever the exact route within the city, the approach is likely to be from Falmer. He asked whether LO'R could work on that basis and show some options. Steve said that he would like to be able to but that discussions about acquisition of sites are necessarily commercially confidential and he would not want to prejudice them.

Cllr Turton hoped there would be progress on the Consolidation Centre and construction route issues for the April meeting however he recognised that the timing was outside the Trust's/Laing O'Rourke's control. He asked Nick to invite City Council Planning Officers and Highways Engineers to the next meeting for this discussion.

Action: Nick / Duane

8 http://www.bsuh.nhs.uk/about-us/hospital-redevelopment/hospital-liaison-group/?assetdetesctl5849799=348720

9 Minutes of 6th December 2010, item 4.5

6.3 **Piling**

A resident asked how the development would be piled. Steve replied that the plan is for the retaining walls to be contiguous pile wall screw-augered rather than pneumatically-driven.

6.4 **Appointment of Contractor**

A resident asked whether agreements reached through the HLG would be binding if LO'R were not appointed for the construction stage.

Steve replied that as discussed at the October meeting[10], the intention is to include the majority of the 'considerate contractor' issues in the s.106 agreement, to be agreed with the City Council as part of the planning application.

Nick added that as Duane said at the December meeting[11], the Trust's intention is to appoint Laing O'Rourke for the construction if the submissions are agreed and the Guaranteed Maximum Price demonstrates value-for-money.

6.5 **Contemporaneous Developments**

A resident asked about the practicalities of undertaking the hospital redevelopment at the same time as the Marina development and a redevelopment of American Express site.

Cllr Turton replied that planning applications are considered individually without regard for other developments in the area. The American Express redevelopment is well underway. Cllr Turton said he had not seen a further application for development of the Marina site.

6.6 **Traffic Impact**

6.6.1 **Aquarium Roundabout**

A resident asked why a more detailed study had been undertaken of the impact on the Aquarium roundabout when Arundel Road is likely to present the bottleneck. Steve replied that the Aquarium roundabout had been highlighted as a particular concern at the December HLG meeting[12] so a further analysis had been undertaken in response.

6.6.2 **Eastern Road**

A resident asked how long Eastern Road would be closed for and how the busses would be re-routed. Cllr Turton replied that there is no plan to close Eastern Road for the development. He added that he feels there are already too many busses using Eastern Road.

6.6.3 **Wilson Avenue**

A resident noted that the top of Wilson Avenue is closed while races are underway. Another resident noted that parking along Wilson Avenue becomes quite congested when there are football matches on the adjacent pitches. They asked that these points be taken into account in the modelling.

6.6.4 **Overall Impact**

Steve reported that as presented to the December meeting[13], a peak of c. 80 construction site vehicles per day (including tippers, concrete lorries, superstructure vehicles and small transit vans) would represent less than a 0.8% increase in traffic overall on Eastern Road. Cllr Turton noted, however, that this is the numbers of vehicles rather than amount of road occupied; HGVs are longer than cars.

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10 Minutes of 11th October 2010, item 4.2 and Appendix A.
11 Minutes of 6th December 2010, item 4.2.
12 Minutes of 6th December 2010, item 4.5 – penultimate bullet point.
13 Minutes of 6th December 2010, item 4.4.

The presentation notes that 'overall increase in traffic is not greater than 2.5%, based on peak value of 80 vehicles per day (all HGVs).' Cllr Turton felt it was a circular argument to say that because roads are currently congested, the impact of the additional construction traffic would be marginal.

Cllr Turton felt that the impact on traffic flows and road infrastructure would be greater than has currently been assessed, eg. necessary junction improvements, impact on residents' parking, alterations of bus pick up/set down points, intersection radii, ambulance access to the hospital.

6.7 **Hours of Operation**

A resident asked about standard hours of operation. Steve replied that as discussed at the December meeting[14], construction sites normally operate 8am to 6pm Monday to Friday, although delivery hours may be more limited. Weekend working would usually be by exception. The City Council would normally include limits on working and delivery hours in its s. 106 Agreement.

6.8 **Replacement Parking**

A resident asked about reprovision of the 80 parking spaces, including staff parking, that would be lost during the demolition and construction stage.

Steve Gallagher replied that discussions with the City Council are ongoing. Steve Chudley added that the plans do not assume any contractors will park on site.

Cllr Turton recalled that there had been discussions within the City Council about park & ride and agreed to follow up.

Action: Cllr Turton

7. **Next Meetings**

The next meeting with be **Monday 4th April** from 7pm (refreshments from 6.45pm) to 9pm in the Audrey Emerton Building. In light of Council elections on 5th May, this meeting will be chaired by Jackie.

Cllr Turton said that future meeting dates would be posted on the website shortly.

[14] Minutes of 6th December 2010, item 4.7.2.

Appendix A

Air Ambulance Helipad: Briefing Note

The most critical factor influencing survival following major trauma is *time to definitive surgery*. The problem with NHS trauma systems is that they have always worked on *time to hospital* as the most important factor in trauma care. The model of care has therefore been to take patients to the nearest A&E following trauma. However many A&Es are in hospitals that do not have all the surgical services needed to treat major trauma available on site. Secondary transfers are then needed to take patients to hospitals with the necessary expertise. The delays caused by these pathways have resulted in the UK's having poor outcomes following major trauma compared to other developed countries.

Changing this system so that patients bypass hospitals that do not have appropriate surgical facilties (eg. bypassing a hospital with no neurosurgery when the patient has a head injury) introduces the challenge of longer journeys.

For the majority of England these longer journeys can be achieved by road with reasonable journey times. The NHS is using 45 minutes as the standard for a safe journey time. Using this standard many areas in the UK can develop their trauma networks without any need for air ambulance helicopters to transport patients. This is why the National Director for Trauma, Professor Keith Willett, has mentioned that helicopters and helipads are not *essential* for the UK's trauma systems.

However, some areas of the country will fall outside the 45 minute road transfer time to a Major Trauma Centre. Because of relatively poor road networks and large geographical area, there are significant areas within the South East Coast SHA that are outside 45 minutes from any Major Trauma Centre. These include parts of Surrey, East Sussex and Kent. Air ambulance transfers remain the best way to overcome problems for these areas.

Recognising patients with severe injuries at the scene of an accident remains a challenge for pre-hospital care teams. A proportion of patients will not be recognised as suffering from major trauma until after assessment at a local hospital. These patients will then need secondary transfer to a hospital able to treat their injuries. Time to surgery is critical so the most rapid transfer available needs to be utilised. For the large catchment area the Royal Sussex County Hospital (RSCH) will serve as a Major Trauma Centre, air ambulance remains the best option for many patients.

We have used national trauma audit data to predict RSCH's activity as a Major Trauma Centre. We estimate that air ambulance transfers to Brighton will be critical in achieving a safe journey time for 50 patients out of a total of 500 per annum. Therefore a helipad is likely to be a critical factor in the outcome and survival for major trauma for a minimum of 50 patients each year.

It is for this reason that we consider a helipad at the RSCH site an essential aspect of the trauma system for the South East Coast.

Mr Iain McFadyen
Chief of Trauma & Consultant Surgeon, BSUH