





Trust Board approval due September 2017 Final business case approval

April 2017 PSCP appointed . Submitted September 2017 for Trust Board approval GMP agreed

December 2017 Start on site November 2018 Completion

Key Features

- Working in a live theatre suite environment adjacent to paediatric operating theatres.
- Working adjacent existing MRI scanners.
- Maintaining existing key hospital services that cannot be isolated or diverted.
- Close liaison with the theatres staff to understand each other's requirements.



Project Description

The Intra-operative 3T MRI and Hybrid Cardiac Theatre project is part new build, part refurbishment at the Leeds Children's Hospital (Clarendon Wing) at Leeds General Infirmary. The Client's scope of works requires the extension of the existing facilities adjacent the 4th floor. The new floor space and housing for the new MRI and Theatre facilities will be contained within a dynamic and iconic design to provide the D Floor extension 16m above ground level.

In response to the Trust's estate strategy, BAM was recently appointed as the Principal Supply Chain Partner through ProCure22 framework to deliver the new intra-operative 3T MRI scanner and hybrid cardiac theatre as part of Leeds Children's Hospital. This will be linked to the existing neurosurgery theatre, cardiac theatre and associated support rooms to enable the new MRI suite to be used intra-operatively with the existing facilities. The existing theatre areas, stores and support office areas will be reconfigured to provide a new entrance and waiting area.

Pre-construction stage

BAM is currently onsite at St James University Hospital within the Leeds Teaching Hospitals corporate planning department. Being co-located has allowed BAM, the Design Team and Client to move quickly to agree confirmed scope of work and offer immediate design solutions, such as reducing the reconfiguration of the services within the existing areas to reduce theatre down time.

Virtual design

Modelling the building and associated work areas with BIM is assisting BAM with stakeholder engagement, allowing the Client to visualise and experience their specialist facilities from an early stage allowing them to make certain the brief will be met prior to construction works progressing. The models will also form part of 'Soft Landings' and Countdown to Handover process during the construction stage.

Spending time with clinical teams in the live hospital environment is enabling the BAM team to fully appreciate the operational constraints and clinical requirements. This has been well received by the Client and is helping in the design of the construction programme and agree onsite changes to the scope of works, providing a more efficient design.

Clinical user engagement

Mitigating potential effects on patient activities in the existing hospital has been delivered through collaborative engagement meetings and shadowing clinical teams. BAM have fully investigated the potential impacts their construction activities could have on patient diagnostics on the three existing MRI scanners. The issues were fully discussed, investigated and agreements reached prior to work commencing.

The construction impact on the scanners has been fully established with collaboration between BAM, the medical physics team and scanning equipment manufacturers. This partnership approach identified direct capital cost benefits of alternative solutions to shielding the magnetic Gauss Field. Early engagement through ProCure22 framework has ensured a transparent development of the initial Client Cost Plan and operational delivery. Protecting the client operational delivery, for example, BAM have programmed the phasing of the high impact works taking place closest to the existing scanners out of hours to minimise vibration impact.

Facts and figures

Project name

Intra-operative 3T MRI and Hybrid Cardiac Theatre, Leeds General Infirmary

- Location Leeds
- NHS Client
 The Leeds Teaching Hospitals
 NHS Trust
- Principal Supply Chain Partner BAM Construction
- **Contract value** £4.536 million
- Building size GIFA 1,060 m²
- Start on site December 2017
- Completion November 2018



