

### **Case Study**

# The Royal Liverpool & Broadgreen University Hospital NHS Trust Critical Care Unit

### The contract required extensive co-ordination and management in order to allow the ward to continue functioning. To facilitate the works with minimum disruption, the unit was segregated and refurbished in 4 phases.

The project consisted of the reconfiguration of the CCU by removing and replacing walls, partitions, doors frames, sanitary ware, fittings, flooring, ceilings and nurse stations.

Besides the general construction element the building is highly serviced and in conjunction with the engineers, Whitfield and Brown replaced the ventilation system which accounted for a large proportion of the overall contract value.

Each of the 8 beds needed piped medical gases and the 3 isolation rooms needed to be kept at negative pressure with the isolation suite having a dedicated extract coupled to an external plant with HEPA filter filtration. An uninterruptible power supply unit (UPS) and isolated power supply system (IPS) maintains electrical safety to medical equipment at the bed spaces connected to patients in the beds was installed.

#### **Key Aspects**

- Segregated works within the existing CCU required close liaison with the ward matron, suppliers and subcontractors.
- ✓ Access for operatives and materials was via a designated platform that ran across the roof from the compound and through a window.
- ✓ The platform had to be guided around the kit that housed specialist laser equipment for the eye hospital.
- ✓ Difficult to engineer and install as the main hot water service main (6") for the complete ward block passed through the area and ductwork had to be routed around these and many other mains.
- ✓ Ventilation plant installed at roof level and due to the required phasing of the works constant volume dampers were installed to avoid the need to re-access voids in handed over phases.

## building on our reputation

|  | St South |
|--|----------|
|  |          |

| Contract Title:  | Critical Care Unit  |
|------------------|---|
| Client:          | The Royal Liverpool & Broadgreen<br>University Hospital NHS Trust |
| Architect:       | Mersey Design Group   |
| Value:           | £1.6 million  |
| Contract Period: | 58 weeks in 4 phases  |
| Procurement:     | Single Stage Tender / Traditional Contract                        |

#### Whitfield & Brown

Halton House, Gorsey Lane, Widnes, Cheshire WA8 ORP

t: +44 (0)151 420 1000 f: +44 (0)151 495 1172

Email: mail@whitfieldbrown.com www.whitfieldbrown.com