



# Healthcare Capability

## SPECTRUM MEP CONSULTING LTD



**Spectrum MEP Consulting** is a consortium of three leading UK Building Services Engineering Consultancies, united to provide effective design services solutions to property development and construction professionals.

The collaboration partners are SI Sealy, Gill Massey and Hannan Associates with a combined 95 years in business. The partners have extensive expertise in different types and sizes of projects, and significant experience in the healthcare sector.

With offices strategically located in the UK and also the United Arab Emirates, we have a total staff base of over 200 and had a combined Turnover of £6.5million in 07/08. We pride ourselves on providing our clients with unparalleled service quality; innovative design solutions and customer focus!



**SI Sealy** was founded in 1949 by Sidney Inwood Sealy and has since grown into one of the foremost building services engineering consultancies in the North of England.

SI Sealy is a building services and environmental consultancy with knowledge and experience across all market sectors. Our flexible consultative approach allows us to exceed our clients' expectations across all market sectors, with particular strength within the healthcare and education sectors.

Our clients trust us to bring creativity and skill to delivering projects on time and to budget.

Dedicated teams, dependable planning and practical monitoring of costs, excellent quality control and outstanding project management are all part of the SI Sealy approach.



**Gill Massey** is a practice of building services consulting engineers operating throughout the UK specialising in the design and project management of mechanical and electrical systems.

The practice is headed by Chartered Engineers experienced in the various disciplines and is committed to the training and the development of staff in order that they can achieve their full potential.

From inception to commissioning and practical completion of projects, Gill Massey provides a comprehensive and professional service.

Gill Massey believes in providing a fully integrated multi-disciplined approach to building services engineering and in so doing provides a professional and quality service to suit the clients' needs and expectations whilst developing close relations with our clients and fellow professionals.



**William E Hannan & Associates** was formed in 1983 by Managing Director Bill Hannan to provide Building Services Consultancy.

The company today continues to focus exclusively on Building Services Engineering and operates from offices in Manchester, London & Edinburgh. We work successfully throughout the UK and abroad and the business has grown consistently.

Hannan Associates is committed to creating successful buildings through attention to detail utilising our breadth of experience, technical skills and with levels of personal attention not provided by our competitors. Our design solutions are renowned for pushing beyond current thinking whilst controlling risk and delivering on the key essentials of client and end user satisfaction.

Hannans has developed a solid track record in a number of sectors and has the capability to manage and deliver projects ranging from building surveys to projects valued in excess of £300m with international design teams.

**Spectrum MEP Consulting** has a wealth of collective experience within the Healthcare sector via the consortium members and individual engineers. Whether it be a new health centre, hospital upgrade and refurbishments or even the establishment of a new hospital on a greenfield site. Spectrum can provide integrated design solutions from the energy centre through to patient services including support departments such as laundries and central sterile stores.

The quality of patient care and treatment is paramount and with the rapidly changing service delivery requirements the M&E services need to be designed so that they are robust and flexible whilst maintaining the highest level of availability and security. Spectrum's attention to detail and development of solutions in association with the healthcare providers ensures the services delivered meet the exacting standards.

- Approved consultants for the North West Consortium of NHS Trusts
- Experienced in all M&E associated with development of: Hospital Wards, Operating Theatres, Mortuaries, Kitchens, Laundries, CSSD Units, Scanners, Special Baby Units and many more facilities.
- Experience of working for many NHS trusts over many years
- Unrivalled reputation for excellence and professionalism within the industry
- Experience and knowledge of Pharmaceutical, Petrochemical, Biosciences, Nuclear, Industrial and Educational facilities.
- Experience and understanding of the critical issues associated with hygienic and containment requirements of facility layouts and supporting services i.e. Q.C. Laboratory, R&DLaboratory, pilot plant, a full scale production unit or a packaging, storage and distribution facility.
- We are true exponents of value engineering and our techniques have ensured that our clients receive value for money solutions.

#### **Our range of services includes:**

- M&E Building Services Design
- M&E Design Development and Enhancement
- Building Health Checks
- Construction Inspection & Supervision
- Services Design Checking
- Feasibility Studies
- Vertical Transportation Design
- Value Engineering Appraisal
- Security and Access Control
- IT Systems Design
- Sustainability Review and Assessments
- Condition Surveys
- BREEAM and LEAD Assessments
- Energy and Carbon Assessments
- Fire Engineering
- Acoustics



**Spectrum has a wide range of experience in all sectors and types of buildings.  
This document provides a sample of our UK Healthcare experience.**



### Tameside Hospital

Members of Spectrum MEP Consulting have undertaken a large number of commissions for Tameside District General Hospital, commencing with the Geriatric Block and Ward 27 in 1994. We have provided engineering expertise for a large number of challenging engineering related projects, acting as lead consultant, such as Laundry refurbishments, replacement Surgical Air & Vacuum plant, Pathology Laboratory and Mortuary alterations. In addition we have worked on a number of architect led schemes such as Ward upgrades, mental health, Consort Building, Stamford Building & new wheelchair centre

More recently we have provided healthcare expertise to design the complex engineering services associated with a number of smaller commissions through our current framework agreement with Tameside & Glossop PCT.

### The Royal Oldham Hospital

The hospital, formerly Oldham & District General Hospital, has had a major redevelopment over the last 10 -15 years with the 4 block 3 storey 'Nucleus' template modular design phase 1 blocks forming the larger part at the front of the site.

Phase 1, with associated design of M&E services, consists of 5 acute 36 bed wards, A&E department, 8 operating theatres including a Charnley-Howarth laminar flow suite, outpatients department including X-ray, audiology and ultrasound, pharmacy and aseptic suite. Subsequently a dedicated building for a CT scanner was dovetailed between A&E and O.P.D.

Enabling schemes for the phase 1 development included a new dual fuel 28,000 kg central steam boiler plant, central incinerator plant and central liquid oxygen plant, and the most challenging scheme of replacing and re-routing all steam and condense distribution throughout the whole site whilst maintaining operation of the various departments and buildings.

### Tameside Hospital NHS Foundation Trust



### The Pennine Acute Hospitals NHS Trust



Previous Projects

### Royal Blackburn Hospital

We were employed to undertake the detailed design of the complex M&E services associated with the major refurbishment and remodelling of the Grade 2 listed historic Victorian building stock to create a state of the art 21st Century Learning Resource Centre .

The development included a full rewire, replacement heating & ventilation plant and extensive data network cabling linked to the UCLAN teaching network.

### Christies Hospital

Having been entrusted with over 60 commissions at Christie Hospital since 1986, we continue to work on development projects right up to the current day. Many commissions relate to key research and diagnostic facilities, critical to the success of the institution.

Recently, we were engaged to undertake the detailed design of the highly complex Transitional Research Facility (T.R.F) Phase 2, which incorporates Cat 2 containment laboratories, tissue culture rooms and research & office accommodation

The Patterson Institute for Cancer Research forms part of the Hospital & S.I.Sealy has recently being engaged to provide M&E design expertise for the new Chemistry Laboratory complex together with the updating and refurbishment of the institute's Tissue Culture facility.

### East Lancashire Hospitals NHS Trust



### The Christie NHS Foundation Trust



Previous Projects

### Stepping Hill Hospital

A number of commissions have been completed at Stepping Hill Hospital, commencing with the new Laundry in 1973. More recently we have provided our healthcare expertise to design the complex engineering services associated with the remodelled A&E Department and Operating Theatres.

Stockport   
NHS Foundation Trust



### Keele MEDIC 3

Working on behalf of Keele Park Developments (a JV between Keele University & Pochin Developments Ltd), we were appointed to provide full M&E consultancy services for the new medical research developments Medic 3 & Medic 4. For each phase we provided a full design and site monitoring service, and each phase was completed on time and on budget, with the final phase being completed in late 2007.

Medic 3 & Medic 4 together provide a combination of research & medical manufacturing space in the form of containment laboratories, write up areas and workshops together with flexible open plan office spaces. Both buildings are constructed to a high specification and are fully air conditioned.



Previous Projects

### Hope Hospital

We were employed by the Mechanical Services Sub-Contractor to undertake the detailed design of the highly complex Mechanical & Electrical Engineering services associated with the new build Neurosciences building at Hope Hospital, Salford.

The development included an MRI Scanner suite, treatment rooms, wards and minor operating theatres.

### Westmorlands District General Hospital

Working on behalf of Ramsey Healthcare, we were appointed in 2007 to provide full M&E consultancy for the new £2.5M operating theatre suite located at Westmorlands District General Hospital. The works included the formation of new Wards, an endoscopy Theatre and a general purpose Operating theatre suite. The project was completed on time and on budget in the summer of 2008.

### Salford Royal

NHS Foundation Trust



### University Hospitals

of Morecambe Bay

NHS Trust



Previous Projects

Blackpool, Fylde and Wyre Hospitals **NHS**  
NHS Foundation Trust

University Hospitals of Morecambe Bay **NHS**  
NHS Trust

The Pennine Acute Hospitals **NHS**  
NHS Trust

Cheshire and Wirral Partnership **NHS**  
NHS Foundation Trust

East Cheshire **NHS**  
NHS Trust

East Lancashire **NHS**  
NHS Trust

Central Manchester and Manchester Children's University Hospitals **NHS**  
NHS Trust

The Robert Jones and Agnes Hunt Orthopaedic District Hospital **NHS**  
NHS Trust

Calderdale and Huddersfield **NHS**  
NHS Foundation Trust

Wrightington, Wigan and Leigh **NHS**  
NHS Trust

Mid Cheshire Hospitals **NHS**  
NHS Foundation Trust

**Affinity Healthcare**  
The Cheadle Royal Hospital Group



Previous Projects



**Philip Murphy**  
Technical Director, Healthcare

**Qualifications:**

ONC Mechanical Engineering  
HNC Building Services

**Personal Statement**

Philip has worked on over 20 projects at Christie NHS Foundation Trust Hospital, a world class facility concerned with the treatment of and research into cancer. Projects include Cytogenetics, Aseptic Suite, Modular Clean Room, P.E.T Scanner, Kay Kendal Laboratory, Paterson Institute, Cytology and TRF 2 Phase 2

Additionally Philip has acted as the Director in charge of various long term frameworks such as Royal Wolverhampton Hospitals, South Manchester University Teaching Hospitals and is currently the Project Director responsible for several schemes at Tameside DGH and numerous new Health Centres for both Lister in Health and Sapphire Primary Care Developments.

**Healthcare Project Experience:**

Westmorland GH – Endoscopy Theatre – Circa £2M  
Barnsley DGH – Major Refurbishment – Circa £5M  
Christie Hospital – Numerous Projects  
Hope Hospital Neurosciences New Build – Circa £5M  
Royal Wolverhampton Hospitals Framework  
South Manchester University Hospitals Framework  
Royal Oldham Hospital – Numerous Projects  
North Manchester DGH – Numerous Projects  
Rochdale Infirmary – Numerous Projects  
University Hospital of North Staffordshire – Numerous Projects  
Lister In health – Numerous Projects  
Manchester Royal Infirmary – Numerous Projects  
Birch Hill Hospital - Ophthalmology Theatre – Circa £2M  
Bury Primary Care – Health Centres – Circa £10M  
GMAS – Numerous Projects  
Sapphire PCD – Various Health Centres  
Royal Bolton Hospital - Cardiac Catheter Laboratory



## **Anthony Massey**

**Partner and Electrical Building Services Engineer**

### **Qualifications:**

CEng  
B Eng. (Hons)  
MCIBSE  
MIHEEM  
AMIEIE

### **Professional Memberships:**

Institute of Electrical and Electronic Incorporated Engineers.  
Institute of Hospital Engineering & Estate Management.  
Chartered Institution of Building Services Engineers.

### **Personal Statement**

Tony has significant and wide ranging healthcare experience comprising surveys, ward upgrades, departmental designs, hospital extensions and new greenfield site hospital developments.

His healthcare experience has been gained at various levels of responsibility ranging from designer through to project leader and associate in charge and the majority of healthcare service deliveries have been covered i.e. operating theatres, special care baby units, ITU, CCU, A&E, radio diagnostics etc. through to the dedicated cancer treatment centres and support services.

His overall experience and knowledge of electrical services design in all types of buildings provides a sound base for advising on all relevant systems.

### **Healthcare Project Experience:**

Withington Hospital  
North Manchester General Hospital  
Derbyshire Royal Infirmary  
Oldham District General Hospital  
Tameside General Hospital  
Manchester Royal Infirmary  
Victoria Hospital, Morecambe  
Oldham District General Hospital  
Hope Hospital Salford – Phase II  
Royal Lancaster Infirmary – Phase III  
Blackpool Victoria Hospital  
Glan Clwyd Hospital  
Royal Oldham Hospital  
Fleetwood Hospital  
Oldham NHS Trust Royal Oldham Hospital  
St Catherine's Hospital, Wirral  
Manchester Children's Hospitals, Booth Hall Hospital  
Cheadle Royal Hospitals Cheadle Royal Hospital  
Ashton House Hospital  
Blackpool Community Hospitals NHS Trust, Blackpool Victoria Hospital  
Victoria Hospital, Macclesfield  
Winsford Health Centre



## **Eric Hart**

**Principal Mechanical Building Services Design Engineer**

### **Qualifications:**

National College Diploma in Heating and Ventilating Engineering  
Chartered Engineer (C.Eng)

### **Professional Memberships:**

Chartered Engineer (C.Eng)  
MCIBSE

### **Personal Statement**

Eric's key attributes are an inquisitive mind in understanding processes and operations and attention to detail in order to develop technically sound and cost effective engineering services solutions to building proposals. Eric has extensive experience of providing building services design solutions for the healthcare sector. During his extensive career Eric has worked for the Royal Liverpool Hospital and the North Western Regional Health Authority and the list below provides a selection of the hospital projects he has worked on during his career.

Over the length of his career his primary expertise has been principally acquired in most types of mechanical services for the health care sector. However the positions Eric has held have also required a good working knowledge of the principles of electrical and allied systems in buildings.

Eric's aim is to always put in the engineering effort at the design/specification stage as this inevitably minimises site problems and makes for a successful project for the company. Within the company Eric is often used as a reference source by younger engineers particularly in identifying 'old' equipment and system types.

### **Healthcare Project Experience:**

Blackpool Victoria Hospital Phase V and Enabling Scheme  
Royal Lancaster Infirmary Phase III Major Development  
Hope Hospital Phase II Major Development  
Blackburn Queens Park Hospital - Mental I.T.U.  
Blackburn Royal Infirmary - Ward Refurbishments  
Stepping Hill Hospital - Theatre Plant Refurbishment  
Stepping Hill Hospital - New Boiler Plant for O.P.D  
Blackpool Victoria Hospital - Refurbishment of Kitchen Ventilation  
Hope Hospital - Bone Marrow Transplant Unit  
Devonshire Royal Hospital, Buxton - De-centralisation of Boiler Plant  
Halton Hospital, Bolton - De-centralisation of Boiler Plant  
Accrington Hospital - Renal Unit  
Blood Transfusion Centre, Manchester - Conversion of ex-circuit board factory to new Regional Centre

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