

**Company:**

The Hampden Consultancy

**Professional Description:**

Building Services Consulting Engineer

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**Details:**

The Hampden Consultancy was formed in 1993 utilising the skills and expertise I had gained from the previous 25 years working for both consulting and contracting firms, dealing with all aspects of building engineering services (mechanical & electrical) on a wide range of projects, located both in the UK and overseas. These included major new hospitals, existing healthcare facilities, royal palaces, airport terminal buildings, government buildings, laboratories, commercial buildings, military establishments, hotel and leisure facilities, as well as residential developments.

Since setting up the Practice I have carried out a wide variety of commissions, including:

- undertaking of surveys and detailed investigations
- 'trouble-shooting' of existing engineering services installations
- preparation of designs & specifications for engineering services installations
- preparation of detailed cost estimates
- supervision of installation works & the costing of any variations arising throughout the course of such works
- witnessing of testing & commissioning procedures
- preparation of 'snagging' or defects lists
- overseeing of the preparation and handover of operation & maintenance documentation in accordance with the CDM Regulations
- preparation and agreeing of Final Accounts in respect to mechanical & electrical engineering services when a quantity surveyor has not been appointed on a particular project

A list of commissions undertaken by The Hampden Consultancy between January 1993 and the current date has been attached.

As such I am able to offer particular expertise with regards to mechanical engineering services, including heating, mechanical ventilation & air-conditioning, hot & cold water services, steam & condensate systems, hydrotherapy pools, medical & industrial gases, as well as the specification & application of thermal insulation to pipework systems and mechanical engineering services plant, particularly in respect to healthcare facilities.

The Practice can also offer expertise in all aspects related to electrical engineering services, again particularly with regards to healthcare facilities.

I have also carried out a number of commissions on behalf of several major PFI consortia on major healthcare projects, including advising bidders on compliance with NHS engineering standards and other related technical issues during the PFI bidding process.

In addition, during the course of my career I have also been involved in the revision and updating of the engineering services elements of a number of Health Building Notes (HBN's) on behalf of the Department of Health. More recently I have assisted in the updating of HTM2025 (Ventilation in Healthcare Premises) and which ultimately became the current Health Technical Memorandum HTM03-01 (Specialised Ventilation for Healthcare Premises).

I am therefore able to provide specific technical advice in respect to ventilation systems within healthcare premises, especially in respect to operating theatre suites and other specialised clinical areas.

I have been involved in the preparation and implementation of tendering and contract documentation in respect to mechanical & electrical engineering services (including sub-contract works) and advising clients, whether end-users or contractors, on the application of such contracts.

I have also advised many clients (including the Home Office) on maintenance and facilities management issues related to mechanical & electrical engineering services. This has included the preparation of maintenance tendering and contract documentation, the supervision of maintenance contracts and the consequential issues resulting from a failure to adequately maintain mechanical & electrical engineering services installations.

Another specialist area that I am able to provide technical advice for is in respect to the design of mechanical engineering services for people suffering from multiple chemical sensitivity.

Finally, in recent years I have been heavily involved in the dispute resolution process. I am an extremely experienced expert witness, having provided technical opinions on matters relating to mechanical & electrical engineering services on claims valued between £10,000 and £10 million.

As part of my duties I have undertaken design audits and/or detailed technical appraisals of both new and existing mechanical & electrical engineering services installations, prepared expert witness reports and provided advice to clients and their legal representatives in respect to disputes concerning technical and/or contractual aspects related to mechanical & electrical engineering services, including issues concerning the maintenance of such installations.

I can therefore act as an expert adviser, preparing reports on issues relating to the failings of installed mechanical engineering services for clients and their legal representatives considering possible litigation/adjudication/arbitration proceedings.

I can act as a party-appointed expert for either the claimant or the defendant in accordance with the Civil Procedure Rules and as such I have also given oral evidence in court, both in the Technology & Construction Court as well as at arbitration and adjudication hearings.

Similarly, I can act as a party-appointed expert for either the claimant or the defendant in accordance with the Criminal Procedure Rules.

Where required, either as a result of an agreement between the parties in a dispute, or at the direction of a Court under rule 35.7 of the Civil Procedure Rules, I am also able to act as a Single Joint Expert.

Where necessary, I can also act as an expert assessor under rule 35.15 of the Civil Procedure Rules.

Particular specialisms (arranged alphabetically) for which I can undertake the expert witness role are:

- Air-conditioning installations
- Calculation of thermal transmittance ('U') values for building fabric elements
- Chilled water & condenser water services
- CHP (combined heat & power) installations
- Commissioning of mechanical engineering services
- Design audits of mechanical engineering services
- Expert determination
- Facilities management (in respect to mechanical & electrical engineering services)
- Flue installations
- Gas and oil-fired boiler plant installations
- Heating installations (LTHW, LPHW, MTHW or MPHW)
- Heat pump installations
- Hot & cold water services
- Hydrotherapy pools
- Kitchen ventilation systems
- Laboratory ventilation (in healthcare premises)
- Local extract ventilation systems
- Maintenance audits of mechanical & electrical engineering services
- Maintenance of mechanical & electrical engineering services
- Mechanical engineering services for healthcare facilities
- Medical gas installations
- Mixed-mode ventilation systems
- Multiple chemical sensitivity (ventilation systems for the sufferers of,)
- NHS technical compliance in respect to mechanical engineering services
- Operating theatre suite ventilation systems
- Operation & maintenance manuals (including the preparation of 'As Installed', 'As Built' or 'Record' drawings)
- Pipework installations
- Positive and/or negative ventilation systems for isolation rooms
- Preparation and application of contracts and sub-contracts, both in respect to the installation of mechanical engineering services and the maintenance thereof
- Preparation of specifications in respect to the design and/or installation of mechanical engineering services and the maintenance thereof
- Professional negligence claims in respect to M&E consulting engineers
- Specialised ventilation systems for healthcare premises
- Steam & condensate systems
- Supply and extract ventilation systems
- Thermal insulation (its selection & application in respect to mechanical engineering services)
- Testing of mechanical engineering services
- Whole life-cycle costings in respect to mechanical & electrical engineering services

In undertaking the expert witness role, I have been retained either directly by the instructing client or by their legal representatives in respect to disputes between building owners/end-users & contractors or between contractors & sub-contractors concerning technical and/or contractual aspects related to mechanical & electrical engineering services, including issues concerning the maintenance of such installations. As such I have worked with many of the UK's leading legal practitioners, including:

- Atkin Chambers
- Berryman Lace Mawer LLP
- Christ Church Chambers
- Clyde & Co. LLP
- Coleman Ctts Solicitors
- Crown Office Chambers
- Decimus Fearon LLP
- Devonshires Solicitors
- Dewey & LeBoeuf LLP
- DLA Piper UK LLP
- EA Law - East Anglian Chambers
- EMW Law
- Farrer & Co.
- Fishburns
- Four New Square Chambers
- Gateley Solicitors
- Greenwoods Solicitors
- Harrison Clark Rickerbys
- Howard Kennedy LLP
- ISS Legal
- Keating Chambers
- Kennedys
- Kitsons LLP
- Lee Crowder Solicitors
- Lyons Davidson
- Marshall Hatchick Solicitors
- Mayer Brown International LLP
- Meade King LLP
- Mishcon de Reya
- M Reale Solicitors
- Olswang Solicitors LLP
- PDT Solicitors
- Pinsent Masons LLP
- St. John's Chambers
- Smith Partnership

**Education:**

Southampton Technical College

Southampton College of Technology

Polytechnic of the South Bank, London

**Professional Qualifications & memberships:**

City & Guilds H&V Technicians' Certificate, Parts 1 & 2

Registered with the Engineering Council (Registration No.424690)

Corporate member of the Institute of Healthcare Engineering & Estate Management (AMIHEEM)

Affiliated member of the Chartered Institute of Building Services Engineers (CIBSE)

Council Member of the Building Services Research & Information Association (BSRIA)

Member of the Association of Consultancy & Engineering (ACE)

Member of the UK Register of Expert Witnesses

**Courses Attended:**

'Working as a Single Joint Expert' – 13<sup>th</sup> November 2009 – Professional Solutions Learning & Development

'Update to Part 35 of the Civil Procedures Rules' – 18<sup>th</sup> November 2009 – Bond Solon Training

'Successful Communication at Experts Meetings' – 20<sup>th</sup> June 2014 – Professional Solutions Learning & Development

'Preparing for Giving Oral Evidence in Court' – 20<sup>th</sup> June 2014 – Professional Solutions Learning & Development

**Membership of Technical Committees:**

BSRIA Heat Interface Unit Steering Group

BSRIA Residential Ventilation Steering Group

BSRIA / UKDEA Heat Networks Design Guide Steering Group

BSRIA Press-fit Carbon Steel Consultation Group

BSRIA Differential Pressure Control Valve Consultation Group

BSRIA Publications Panel

## **Career History**

### **January 1993 - Current Date**

#### **The Hampden Consultancy**

Following the completion of the Westminster & Chelsea Hospital project I left Laing Management Limited and formed a building engineering services consultancy, specializing in trouble-shooting and problem-solving roles alongside expert witness activities.

Since January 1993 the consultancy has undertaken a wide range of commissions pertaining to all aspects of mechanical and electrical engineering services, details of which are attached, together with a list of clients.

### **March 1990 - December 1992**

#### **Laing Management Limited**

Appointed initially as a Building Services Manager for the Westminster and Chelsea Hospital Project, I was given special responsibility for managing the co-ordination and installation of specialised engineering services. These included medical and pathology gases, sprinkler installation, ultra-clean theatre suites, operating theatre pendants and service rails, cold rooms, hydrotherapy pool, maxillo-facial clinic, catering equipment installation and decorative water features.

Besides this I also carried out a design co-ordination role which involved liaising with the other members of the professional team, reviewing the designs and specifications for many of the engineering services works packages prior to tender and co-ordinating the flow of design information between the Design Team and the various engineering services works package contractors.

In addition, I had the following responsibilities:

- overseeing the activities of the engineering commissioning team throughout the course of the whole project
- the co-ordination of activities concerned with the installation of end-user equipment (both new & existing)
- co-ordinating and vetting the operation and maintenance manuals received from the many engineering services contractors involved on the project
- assisting in the development of the Facilities Management package on behalf of the hospital trust

### **March 1986 - February 1990**

#### **J. E. Greatorex & Partners**

Recruited as a senior engineer in charge of a multi-discipline design section working primarily on healthcare projects, I was involved in most cases from the initial conceptual design to the final account including the overall supervision of the services installation.

In addition, I carried out a number of feasibility studies, energy surveys and similar commissions that ultimately necessitated the preparation of detailed cost reports and/or technical studies.

### **March 1974 - February 1986**

#### **Upton Associates**

Originally employed as an intermediate design engineer, I progressed to senior design engineer and eventually headed a design section involved with multi-services projects, both in the Middle East and the UK.

I was responsible for the design and specification of the full range of mechanical pipework services on all projects. In addition, I was also involved in the design and specification of kitchen and laundry installations on many of the hospital projects. In many cases my responsibilities included the overall supervision of services installations on many of the UK projects.

### **July 1968 - February 1974**

#### **Thomas King and Sons (Builders) Limited**

Initially engaged as a trainee designer/estimator within the heating department on a student apprenticeship for a period of five years.

During this time I was responsible for the design and costing of mechanical services associated with various projects including private dwellings, shops, horticultural buildings, swimming pools, offices and light industrial units, as well as Ministry of Defence establishments.

## **COMMISSIONS UNDERTAKEN BY THE HAMPDEN CONSULTANCY**

**(FROM JANUARY 1993 TO CURRENT DATE)**

<b>Client and/or case</b>	<b>Project</b>
West Berks Priority Care Service NHS Trust	Preparation of standard maintenance contract documentation for commercial use by the Trust's Estates Department.
Sealmaster Limited	Consultancy advice in respect of fire safety engineering in hospitals.
Property Services Agency	Energy survey and feasibility study with cost appraisal in respect of the swimming pool complex at the Royal Naval College, Dartmouth.
PPP Beaumont Plc.	Survey report, feasibility study (with cost appraisal) and implementation of refurbishment works within a private nursing home.
Churchill Hui (on behalf of John Groomes Housing Association)	Design and specification of the mechanical and electrical engineering services as part of the refurbishment of a sheltered housing scheme in Caterham.
Haywards (on behalf of Birch Technology)	Condition survey and detailed report on the existing mechanical and electrical engineering services within an office building in Wokingham.
BM South & West	Energy survey and feasibility study with cost appraisal in respect of a proposed solar panel installation at the Royal Marine barracks, Plymouth.
The Churchill Clinic	Feasibility study and detailed cost appraisal in respect of upgrading the air-conditioning installation within an existing operating theatre department at a private London hospital.
Chestertons (on behalf of the Church Commissioners)	Condition survey and detailed technical report on problems concerning the air-conditioning installation within a large office building in Oxford.
Air Court Environmental Services	Design and specification of the mechanical engineering services as part of the refurbishment of Marlow Rugby Union Football Club.
Paul Frampton, Esq.	Survey report and detailed cost estimates for litigation purposes in respect of existing heating and domestic water services installed within a large country residence.
John Diment, Esq.	Consultancy advice in respect of modifications to the existing heating installation within a listed residential building.
Arjo Wiggins Ltd.	Condition survey and budget cost report on the existing heating, electrical and emergency lighting installations at their research & development site in Beaconsfield.
West Berks Priority Care Service NHS Trust	Preparation of a budget cost report for the provision of a new lightning protection installation at Fairmile Hospital.
West Berks Priority Care Service NHS Trust	Preparation of cost report in respect of extending the existing fire alarm and detection system at Fairmile Hospital.
West Berks Priority Care Service NHS Trust	Preparation of a budget cost report considering alternative types of fire alarm and detection systems for Wokingham Hospital.
The Kingshill Collection Limited	Consultancy advice with regard to the provision of additional heating within warehousing facilities in Saunderton.

<b>Client and/or case</b>	<b>Project</b>
Churchill Hui (on behalf of the Metropolitan Housing Trust)	Condition survey and brief report on the existing mechanical and electrical engineering services within a local authority hostel.
West Berks Priority Care Service NHS Trust	Preparation of a supplementary report, including budget costings, on upgrading the existing fire alarm and detection system at Fairmile Hospital.
West Berks Priority Care Service NHS Trust	Design, specification and project management of the installation of a new radio-linked fire alarm and detection system at Wokingham Hospital.
Arjo Wiggins Ltd.	Overseeing testing of existing electrical installations within offices at their research & development site in Beaconsfield and report on the test results obtained.
Andrew Davidson, Esq.	Consultancy advice in respect of modifications to an existing heating installation within a large residential building partially converted for commercial purposes.
Arjo Wiggins Ltd.	Design and specification of a new emergency lighting installation at their research & development site in Beaconsfield.
Shaw & Hatton International Limited (on behalf of the Home Office)	Preparation of tender documentation relating to the engineering services element of a facilities management contract involving five major government buildings forming part of the Central London Estate, including Queen Anne's Gate.
Arjo Wiggins Ltd.	Design, specification & project management in respect to the upgrading & rewiring of existing electrical installations within offices at their research & development site in Beaconsfield.
Nigel Rose & Partners (on behalf of Gemleigh)	Condition survey and budget cost report on the refurbishment of the mechanical & electrical services within a private nursing home in Reading.
Chalfont Plumbing & Heating Service	Acting as an expert witness in a dispute relating to a mechanical engineering services installation.
King, Sturge & Co. (on behalf of the Church Commissioners)	Implementation of recommendations of an earlier report concerning the air-conditioning installation within a large commercial building in Oxford, including carrying out commissioning checks on the heating, chilled water & ventilation systems, undertaking camera surveys of the ductwork installation, overseeing water treatment of heating & chilled water systems, preparing additional reports and budget costings.
Crowthers	Consultancy advice in respect of the CDM Regulations as they related to engineering services in Littlemore Hospital in Oxford.
King, Sturge & Co. (on behalf of the Church Commissioners)	Preparation of technical reports & other documentation involved with acting as an expert witness to the Client's legal advisers.
Home Office	Design, specification and project management in respect of the replacement of large secondary filter banks and the provision of new primary filter banks within existing main air-handling plants at Queen Anne's Gate.
Aylesbury Vale District Council	Report on the installation of an 'ultra-clean' ventilation system & water filtration system for a house occupied by person suffering from multiple chemical sensitivity (MCS), including the provision of detailed budget costings.



<b>Client and/or case</b>	<b>Project</b>
Home Office	Report on refurbishment of water storage tanks in various government buildings forming part of the Central London Estate, including Abell House, Cleland House & Horseferry House.
King, Sturge & Co. (on behalf of Oxford University Press)	Reviewing partitioning layouts within a large office building in Oxford and advising on the implications to the existing air-conditioning and fire alarm/detection installations.
Home Office (on behalf of the Prison Service)	Replacement of existing steel sectional water storage tanks with new GRP sectional tanks in two government buildings forming part of the Central London Estate, namely Abell House and Cleland House.
Aylesbury Vale District Council	Design, specification & project management of the installation of an 'ultra-clean' ventilation system & water filtration system for a house occupied by person suffering from multiple chemical sensitivity (MCS).
Home Office	Demolition of existing tankroom & removal of existing galvanised water tanks on the roof of Horseferry House in central London and the installation of a new GRP tank and weatherproof housing.
Preface Limited (on behalf of the Hammersmith Hospitals NHS Trust)	Consultancy advice in respect to the provision of mechanical services for sub-basement toilet accommodation in Hammersmith Hospital.
Keith Green, Esq.	Report on proposed new heating installation in a large residential property.
Aylesbury Vale District Council	Overseeing the maintenance contract in respect of an 'ultra-clean' ventilation system & water filtration system for a house occupied by person suffering from multiple chemical sensitivity (MCS).
Home Office	Preparation of a detailed cost report on options for treatment of cooling tower feed water in Abell House and Cleland House.
John Diment, Esq.	Condition survey and design of replacement heating system for a listed residential building.
Mrs. Janet Clerc	Survey report and detailed cost estimates for litigation purposes, acting as an expert witness in a dispute relating to a partially-completed heating installation in a listed building and the subsequent re-design of the heating system.
Roberts & Partners (on behalf of Camelot Group Plc.)	Carry out snagging of mechanical installations at the Camelot National Lottery Primary Data call centre facility in Rickmansworth, together with witnessing the testing and commissioning of mechanical services.
York Engineering Services Limited (on behalf of London Underground Ltd.)	Design of mechanical services installations for new cleaning facilities accommodation at the railway engineering works in Neasden.
Institute of Food Research, Reading	Overseeing the re-balancing of existing mechanical ventilation systems within laboratory areas, including minor refurbishment works to ductwork layouts
London Arts School	Advice on energy efficiency proposals as part of the DETR's Design Advice Scheme

<b>Client and/or case</b>	<b>Project</b>
Symonds Group (on behalf of London Luton Airport Operations)	Retained as M&E Technical Adviser to the Contract Administrator (Symonds Group) and as the Resident M&E Clerk of Works on behalf of the London Luton Airport Authority involved in overseeing the installation & commissioning of the mechanical & electrical installations within the New Terminal Building at London Luton Airport.
The SVM Partnership (on behalf of Stoke on Trent Council)	Assisting the Legal Department of The SVM Partnership on a number of issues pertaining to contractual claims from the M&E Contractor and the Project Architect against the Client (Stoke on Trent Council) and assisting in the preparation of the Expert's Report.
Evans & Crawley (on behalf of the Chesham Building Society)	Investigation into problems associated with the heating and air-conditioning installations in the head office of this particular client, including providing recommendations and detailed cost proposals for rectifying identified problems.
Hammersmith Hospital NHS Trust	Re-design of the existing supply & extract mechanical ventilation systems to suit requirements of the Urodynamics Department at Hammersmith Hospital.
Broadsword Holdings Ltd. (on behalf of Amey Asset Services)	Undertaking a status review of the mechanical & electrical engineering services installation on a £65 million immigration detention centre at Thurleigh.
Chesham Building Society	Investigation into problems associated with poor environmental conditions within one of the branch offices of this particular client.
Crown House Engineering (part of the Carillion Group)	Providing consultancy support to the major projects division of the company in respect to PFI bid for South Derbyshire Hospital, including advising on NHS compliance in respect to engineering services.
Crown House Engineering (part of the Carillion Group)	Providing consultancy support to the major projects division of the company and undertaking the design manager role in respect to a PFI bid for Walsgrave Hospital at Coventry, including advising on NHS compliance in respect to engineering services.
Mentmore Homes Limited	Consultancy advice with respect to mechanical services on a large residential development, including undertaking the calculation of heat losses and preparation of a report on the use of underfloor heating throughout a large residential development.
Chesham Building Society	Preparation of a detailed study of the existing central heating systems in the head office of this particular client, including making specific recommendations as to resolving particular problems previously identified.
Crown House Engineering (part of the Carillion Group)	Providing engineering services consultancy support to the major projects division of the company and undertaking the design manager role in respect to a PFI bid for the Joint Services GHQ at MOD Northwood.
Chesham Building Society	Preparation of design, specification and tender documentation in respect to the refurbishment of an existing ventilation system in a branch office.
TPS Consult	Undertaking a design audit and report on the proposed gas installation and associated builderswork for the Great Western Hospital in Swindon.

<b>Client and/or case</b>	<b>Project</b>
Crown House Engineering (part of the Carillion Group)	Providing consultancy support to the major projects division of the company and undertaking the design manager role in respect to a PFI bid for the John Radcliffe Hospital in Oxford, including advising on NHS compliance in respect to engineering services.
Chesham Building Society	Project management of the works in connection with the refurbishment and alterations to the existing mechanical ventilation system in a branch office, including witnessing the testing and commissioning.
SBS Maintenance	Assessing and resolving claims resulting from an uncompleted contract at Willow Wood Studios in Amersham as a result of the demise of the proprietor of SBS Maintenance.
SVM Group (on behalf of Mowlem Construction)	Assisting in the preparation of the various expert reports and other legal documents to be used in an arbitration hearing in relation to a complex construction dispute at the GCHQ Building in Cheltenham.
Lamps & Tubes Illuminations Limited	Preparing and agreeing the settlement of the Final Account for Jessel House in London.
Lamps & Tubes Illuminations Limited	Consultancy advice in respect to a tender for a term maintenance contract for the MK Centre in Milton Keynes.
Skanska Rashleigh Weatherfoil	Undertaking a design audit and the preparation of a detailed report in respect to non-compliance of the mechanical ventilation and air-conditioning installations with NHS engineering standards at the Queen Elizabeth Hospital, Woolwich.
Lamps & Tubes Illuminations Limited	Preparation of standard forms of maintenance and measured term contract documents.
Skanska Rashleigh Weatherfoil	Undertaking design audits of the mechanical ventilation systems serving the various operating theatres situated on the Coventry Hospital PFI Project, including the preparation of sample ventilation calculations in accordance with HTM2025 in order to establish and/or verify correct airflow quantities, nominal room pressures and relevant airflow directions.
Action Energy	Validation of Energy Loan applications
Angus Hilson Moran Healthcare Alliance	Providing consultancy support to a joint venture consortium in respect to the preparation a PFI bid for the Peterborough Hospitals project, including advising the consortium on compliance with NHS standards and where necessary obtaining derogations with the Trust advisers in respect to any areas of non-compliance.
Olswang Solicitors LLP	Consultancy advice in respect to a technical issue regarding patents.
Ferrovial Agroman/Amey	Preparation of a detailed cost plan at the FITN stage in respect of the engineering services design proposed for the Peterborough Hospital PFI Project.
Tom Tech (on behalf of NHS Estates)	Assisting the lead editor (Martin Thomas) in the preparation of the revised HTM2025 - 'Ventilation in Healthcare Premises' with particular reference to manual calculations for operating theatre ventilation (this document was subsequently issued as HTM 03-01 'Specialised ventilation for healthcare premises').
White Young Green (on behalf of Bouygues UK)	Acting as a consultant design manager on behalf of a major engineering services consultancy in respect to a PFI bid for the Lewisham Schools Project.

<b>Client and/or case</b>	<b>Project</b>
Red Engineering Design Limited (on behalf of Morgan Stanley)	Preparation of initial report, outline scheme design, scope of works and budget costs for remedial works to an existing air-conditioning system serving trading floors.
Red Engineering Design Limited (on behalf of Morgan Stanley)	Project managing the refurbishment and upgrading of the engineering services and IT infrastructure for a communications room.
Skanska Rashleigh Weatherfoil	Overseeing remedial works necessary to the mechanical ventilation systems serving the various operating theatres situated on the Coventry Hospital PFI Project following failure of installed systems during the commissioning stage; then overseeing re-commissioning of the amended ventilation systems and signing –off prior to handover to the hospital client.
Capita Symonds (on behalf of Carillion plc)	Condition surveys and reports on several hospital and commercial sites in the North East & North West regions of London for the installation and operation of diagnostic clinics under PFI contracts.
Capita Symonds (on behalf of Carillion plc)	Condition surveys and reports on several hospital and commercial sites in the South East & South West regions of London for the installation and operation of diagnostic clinics under PFI contracts.
Hammersmith Hospital NHS Trust	Re-design of the mechanical ventilation system serving the breast-screening clinic at Charing Cross Hospital.
Capita Symonds (on behalf of Carillion plc)	Condition surveys and reports on several hospital and commercial sites in the North East & North West regions of London for the installation and operation of elective surgery clinics under PFI contracts.
Wilmott Dixon Limited	Undertaking design audit of the architectural & engineering services design for Waldron Health Centre in respect to NHS compliance.
Capita Symonds (on behalf of Carillion plc)	Condition surveys and reports on several hospital and commercial sites in the South East & South West regions of London for the installation and operation of elective surgery clinics under PFI contracts.
Capita Symonds (on behalf of Carillion plc)	Condition surveys and reports on several hospital and commercial sites in East Anglia region for the installation and operation of diagnostic & surgical facilities under PFI contracts.
18 High Street, Watlington (on behalf of Lance Adlam Architects)	Detailed design study for the provision of mechanical & electrical engineering services, including kitchen extract ventilation for an Indian restaurant.
Cafe Le Raj, Henley-on-Thames (on behalf of Lance Adlam Architects)	Detailed design study for the provision of new kitchen extract ventilation for an Indian restaurant.
Rotary Southern (on behalf of Cromwell Hospital)	Detailed budget cost report on the replacement of air-handling units in 5 <sup>th</sup> Floor Plantroom and the refurbishment of the variable air volume (VAV) units within all ward areas of the Cromwell Hospital.
Wilmott Dixon Limited	Undertaking design audit of the architectural & engineering services design for Jubilee Gardens Health Centre in respect to NHS compliance.

<b>Client and/or case</b>	<b>Project</b>
Rotary Southern (on behalf of Cromwell Hospital)	Detailed report on the existing ventilation systems serving the TomoTherapy Treatment Rooms in the Radiology Department of the Cromwell Hospital.
Rotary Southern (on behalf of Cromwell Hospital)	Detailed budget cost report on the mechanical & electrical engineering services elements relating to the provision of new linear accelerators within the basement area of the Cromwell Hospital.
Rotary Southern (on behalf of Cromwell Hospital)	Detailed budget cost report & design of the mechanical engineering services for a new Well Woman Clinic incorporating an Endoscopy Suite within an existing operating theatre department at the Cromwell Hospital.
Royal & Sun Alliance Insurance Group	Investigation & preparation of detailed report into causes of corrosion on chilled water pipework in multi-storey office building in Central London, including advice on suitability and application of thermal insulation to chilled water pipework; subsequently appointed as a single-party expert witness acting for the Royal & Sun Alliance Insurance Group in court proceedings.
BUPA Healthcare	Detailed report into the replacement of all existing air-handling units situated throughout the Cromwell Hospital that currently did not comply with Health Technical Memorandum HTM03-01 (Parts A & B) – Specialised ventilation for healthcare premises (2007), together with the refurbishment of the variable air volume (VAV) units located in the ward areas throughout the hospital and the re-design of the mechanical ventilation systems serving the operating theatre suites and other specialist healthcare departments.
Hilson Moran Partnership Limited	Undertaking detailed design audit of the mechanical engineering services within the Cleveland Clinic (22-storey) of the Abu Dhabi Hospital in respect to NHS compliance.
Weatherhead Electrical Services Ltd. -v- Mr. & Mrs. Efstratiou	Appointed by Oxford County Court as single joint expert in dispute regarding extent and amount of invoices submitted by electrical contractor.
The Skinners' Charity	Investigation into failures of hot water and heating systems at residential care home development in Palmers Green, Enfield; preparation of detailed report on findings; agreeing necessary remedial works with both client and contractors as a result of detailed report; overseeing various remedial works undertaken and identification of further necessary works.
Alexander Maltby Ltd. -v- Mr. & Mrs. Mycock	Appointed by Bristol County Court as single joint expert in a dispute regarding the design of the cold water system in a residential property.
Laing O'Rourke v WSP + Canopus	Undertaking a design audit and the preparation of a detailed report in respect to non-compliance of the mechanical ventilation and air-conditioning installations with NHS engineering standards at the Maidstone Hospital, the Ashford Hospital and the Kent & Canterbury Hospital.
The Skinners' Charity	Design, specification & project management of the replacement of existing gas-fired hot water heaters in a rooftop plantroom at a residential care home development in Palmers Green, Enfield.
Banner Homes Southern Limited	Investigation & report on problems associated with electrical power supply problems being experienced on a luxury residential development prior to litigation.

<b>Client and/or case</b>	<b>Project</b>
The Skinners' Charity	Preparation of design & specification for remedial works to the tankroom in the roof void at a residential care home development in Palmers Green, Enfield.
Mr. Baskind -v- Speymill Contracts Limited	Acted as a party-appointed expert witness in arbitration in respect to problems in the installation of mechanical & electrical engineering services at a former hotel converted into a large residential property.
Pro Systems London -v- Mr. & Mrs. Bevan	Appointed by Chichester County Court as a single joint expert in a dispute regarding the work undertaken by an electrical contractor.
ISS Facility Services Limited	Investigation & preparation of detailed report into the merits or otherwise of a claim against a firm of consulting engineers prior to litigation.
City of London & LS Bankside Ltd -v- Carillion (AMBS) Ltd & others	Investigation & preparation of detailed report considering the site management & execution of maintenance activities and fit-out works on a large commercial site in London following a fuel oil spill prior to litigation.
Best Bar None -v- SSE	Investigation & preparation of detailed report considering problems associated with failure of an incoming electrical supply prior to litigation.
Gooch & Housego -v- Cole & Partners	Acted as a party-appointed expert witness in a dispute regarding the work undertaken by a building services consulting engineer on a large factory development.
Shadi Danin Ltd -v- Arkle Finance Ltd and others	Appointed by Horsham County Court as a single joint expert in a dispute relating to the supply & installation of two hydrotherapy pools at a spa clinic.
Healthcare Support (Newcastle) Limited	Undertaking a review of the situation in respect to non-compliance of the mechanical ventilation and air-conditioning installations serving an angiography room with NHS engineering standards and the preparation of an initial report on the matter.
Northern Ireland Health Group (on behalf of Dalmore Capital Limited)	Undertaking a design risk assessment and detailed study into problems associated with the failure of a twin busbar installation within a service tunnel at the South West Acute Hospital, Enniskillen, Northern Ireland.
Animal Health Trust, Newmarket, Suffolk	Undertake a detailed review and prepare a report on the design and implementation of a standby generator installation and its corresponding operation in conjunction with an existing HV installation at a veterinary hospital.
Buckinghamshire County Council Trading Standards Service	Investigation and report on the installation, operation and suitability of a proprietary device fitted to an existing central heating in residential premises as part of an overall investigation by various local authority trading standards offices located throughout the UK.
Moore Place Holdings LLP	Investigation and report on the impact of inclement weather on the 'first-fix' M&E engineering services currently installed in a new care home due to the building not being weathertight.
Sodexo Property Solutions Limited	Acted as a party-appointed expert witness in a dispute regarding the performance and compliance of mechanical ventilation systems serving operating theatres and delivery suites at the Hereford County Hospital.

<b>Client and/or case</b>	<b>Project</b>
EMS Limited -v- Emerson Network Power	Acting as an expert adviser in a dispute regarding the installation of air-conditioning units for a IT server room in an industrial premises, including advising on whether it was 'fit for purpose' and also assessing extent of design responsibility.
Grand Union Housing Association	Acting as an expert adviser in a dispute regarding the overheating of the public areas within a newly-built residential care home, the lack of ventilation within the public areas and other related matters.
Neptune Marina Properties Limited -v- Redrow Homes (Eastern Limited) & ISG Jackson	Acting as a party-appointed expert witness in a dispute regarding the failure of the boosted freshwater system caused by the use of disparate pipework materials, the undersizing of the booster pump set and the cause of the copper pipework corrosion, together with sundry other matters.
Mr. Evans -v- Places for People Homes Limited	Acting as a party-appointed expert witness in a dispute regarding alleged carbon monoxide poisoning as a result of a faulty boiler flue.
Mr. Ahmed -v- Transport for London	Acting as a single joint expert witness in a dispute over water ingress as a result of an air-conditioning unit on an adjoining property discharging waste water onto the flat roof of a domestic premises.
EPEG & WEL -v- AUKDL & AUKDSL	Acting as a party-appointed expert in a dispute in respect to the commissioning and maintenance of a chiller unit.
Aragon Housing Association - v- Bellcross Homes	Acting as a party-appointed expert witness in a dispute regarding the overheating of the public areas within a newly-built residential care home, the lack of ventilation within the public areas and other related matters.
Cohen & Cohen & Avenue Banqueting Limited -v- VolkerFitzpatrick Limited	Acting as a party-appointed expert witness in a dispute regarding various problems associated with the installed mechanical engineering services in a hotel, including boiler flues, thermal insulation to the chilled water pipework and the alleged inoperability of the building management system.
Mr. Mert Alas -v- Newman Zieglemeier Ltd	Acting as an expert adviser to the Claimant by providing assistance in order to understand the nature of the technical issues resulting from a defective underfloor heating system and to provide a report on the appropriate remedial solutions.
Queen Court Right To Manage Co. Ltd. -v- Emore & Emore	Acting as a party-appointed expert witness on behalf of the Claimant in a dispute regarding the encroachment on existing mechanical & electrical plant located within a basement of a multiple-residential building by the unauthorised erection of internal brickwork walls by the Defendants and to provide a report on the appropriate remedial solutions.
David Holman Co. Ltd. -v- Mr. Christopher Allnutt	Acting as a party-appointed expert witness on behalf of the Claimant in a dispute regarding the unauthorised use of electricity by the Defendant in respect of his occupancy of a ground floor office area in a multiple-tenancy building, including assessing the likely consumption and usage of electricity supplies during the period of his tenancy and to provide a report on this assessment.
Mr. Paul Howkins -v- Ms. Alexandra Wills	Acting as a single joint expert witness in a dispute regarding an alleged defective oil-fired boiler installation.
Mr. Shahik Mardeross	Acting as an expert adviser in preparing a report on a fuel oil leak from a redundant fuel oil tank located in a cellar area.

<b>Client and/or case</b>	<b>Project</b>
Mr. Paul Kemwall	Acting as an expert adviser in preparing a report on issues relating to a drainage installation within a new residential property.
DV4 Eadon Development UK Limited –v- Laing O'Rourke	Acting as a party-appointed expert witness on behalf of the Claimant in a dispute regarding overheating in residential accommodation within two tower blocks.
Helmwell Biogas Ltd -v- Gissing F.E. Ltd	Acting as a party-appointed expert witness on behalf of the Claimant in a dispute regarding the alleged failure of rotary lobe pumps in discharging effluent from a reservoir onto agricultural land.