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A Profile of Capability

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*Sustainably creating
better places to live and work*



THE FIRM'S PHILOSOPHY

FOUNDATION:

For over 20-years, the Firm that Andrew Wilkes founded as an alternative to conventional consulting practices has become synonymous with success.

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SCOPE OF ACTIVITIES:

ANDREW WILKES MANAGEMENT led the vanguard for a new breed of Consultant specialising in the design of advanced buildings and dwelling places for people. The Firm specialises in WorkPlace Engineering and Environmental Consultancy thus creating sustainable, efficient, healthy and environmentally responsible buildings. The Partners' belief in aesthetic proportion enhances architectural judgement whilst an holistic approach addresses the fundamental issues of concern to today's building occupiers.

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RANGE OF COMMISSIONS:

The wide range of commissions undertaken is testimony to the Firm's capability, whilst the unique combination of major and minor appointments shows the true professionalism that Andrew Wilkes redefined. Known for innovative and leading-edge concepts, the practice is often thought of alongside the largest of consulting practices.

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SOLUTIONS:

Although the Firm has a reputation for success with avant-garde concepts, these are always founded upon extremely economic solutions. By placing emphasis where required, financial resources are correctly directed both in capital and operational terms.

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CAPABILITY:

The Practice is now a well established, leading Consultancy with a high quality Client Portfolio that takes it to all parts of the world. The Firm employs an eclectic mix of professionals with a portfolio of appointments ranging from the commercial to the exemplar.

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SERVICES:

The Firm is frequently invited by a whole range of organisations to advise upon the critical factors that affect their business performance: National & Local Government; National & International Companies; and, Charities & Start-up Businesses. This advice can be as pragmatic as: Energy Utilisation, Thermal Comfort, Lighting Design, Life Safety Systems; Information Technology; or, Building Services. More-often-than-not, however, the Firm advises upon the total impact that the workplace has upon the overall productivity of the Client's organisation.

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WorkPlace Engineering demands a close integration with architectural and internal design issues if an holistic solution is to occur - a result that allows capital costs to be minimised and costs-in-use to be optimised. Intimate knowledge of all building technologies allows each element to be honed by professional Design, Management and Financial Planning.

RESEARCH AND DEVELOPMENT

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Lateral thought pervades the Firm's philosophy. It is through the substantial Research and Development undertaken by the Practice that concepts, once mere ideas, have now been accepted as commonplace by other designers. The practice has created some of the most innovative concepts for modern workplace design. The Firm works closely with leading academic institutions. Using advanced techniques such as Virtual Reality Computational Fluid Design [CFD(V-R)] and experimental modelling using hydro-bath scale models of buildings [in conjunction with the University of Cambridge], ultra-low energy solutions have been developed for a range of building types.

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Creative products such as Localised Air Filtration [LAF - personal control of HEPA filtered air at the desk] have allowed improved user satisfaction, less absenteeism and greater health & well being. Location Independent Working [LIW] practices have been brought about by increased access to data and centralised filing. Lower energy demand has resulted from Façade Engineering employing a third-pane projected from the traditional elevation surface.

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OFFICE PRODUCTIVITY:

Advanced ideas and concepts are equally as relevant and, in particular, focus upon the efficiency of office dwellers and business process re-engineering - factors that directly affect the profit performance of all organisations. The past few years have witnessed a revolution in the way accommodation is designed and procured. The excesses of the 1980's have given way to a more enlightened philosophy that is inward looking: providing efficient facilities to attract and keep the key staff who directly affect the profitability of the organisation - allowing it to compete in the global marketplace that the United Kingdom, Europe and the rest of the world, has become.

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THE VIRTUAL CONSULANCY STRUCTURE:

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Andrew Wilkes Management is able to undertake a whole variety of appointments. The way in which the Firm undertakes such commissions is, as might be expected, at the forefront of management structure and culture. Strategic Partnerships and Alliances have been formalised into a Virtual Consultancy structure enabling single-point responsibility to be matched with the knowledge-base or capability that a particular appointment requires.

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PRACTICAL REALISATION:

The advanced thinking and design that the Partners advocate is brought to practical realisation by appropriate skills at all stages. Using quality assured business processes, carefully migrated design theory is transferred to the construction stage and a successful outcome is ensured by precise management of the Commissioning and Handover activities.

QUALITY ASSURANCE:

Much of the Firm's work is derived from referral and repeat business. The Partners are proud of this track record and safeguard their reputation by remaining totally committed to the whole of the Briefing, Design, Construction and After-Care stages. Each stage has its own emphasis and the Partner's policy of total involvement is an integral part of the Firm's Quality Assurance procedures.

CLIENT PORTFOLIO:

The Partner's original aims and objects were to redefine the workplace design service in the UK. This has been achieved with a whole variety of satisfied Clients.

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| ◇ 3M UK PLC | ◇ Janssen Pharmaceuticals |
| ◇ Amtrak | ◇ Knightstone Housing Association |
| ◇ Argent Group | ◇ Limehouse Television Productions |
| ◇ AT&T | ◇ London Fire and Civil Defence Authority |
| ◇ Audit Commission | ◇ Lotus Development UK |
| ◇ Avoncroft Museum | ◇ Malvern Theatres |
| ◇ B&Q | ◇ Matrix Reality Holdings |
| ◇ Bank of Ireland | ◇ Mead Packaging |
| ◇ Bankers Trust | ◇ Minskpromstroy |
| ◇ Barclays Property Holdings | ◇ Mitel |
| ◇ Bell Northern Research | ◇ MOOG Controls |
| ◇ Berkeley Homes | ◇ Motor Industries Research Association [MIRA] |
| ◇ Birmingham Mint | ◇ Naomi House Hospice |
| ◇ Bisley Office Furniture | ◇ National Trust |
| ◇ British Gas | ◇ News Corporation |
| ◇ British Library | ◇ Queen Alexandra Colleges |
| ◇ British Motor Industries Heritage Trust | ◇ Oracle Software |
| ◇ British Rail/Network Rail | ◇ Parkridge Holdings |
| ◇ British Telecom | ◇ Principality Building Society |
| ◇ Burford Group | ◇ Prudential Assurance |
| ◇ Cable & Wireless/ Mercury Communications | ◇ Random House/Tiptree Book Services |
| ◇ Cadbury's - ITnet | ◇ Rover Group |
| ◇ Carphone Warehouse | ◇ Royal National College for the Visually Handicapped |
| ◇ Central Television | ◇ Sandstone Group |
| ◇ City of Birmingham Symphony Orchestra | ◇ Sark Power Station |
| ◇ City of Sheffield | ◇ Severn Trent plc |
| ◇ City of Stoke-on-Trent | ◇ Sketchley Group |
| ◇ Commercial Estates Group | ◇ Sommer Allibert |
| ◇ ComputerCentre | ◇ South West Water |
| ◇ Cosworth | ◇ Southampton University |
| ◇ Diocese Of Birmingham | ◇ Spenhill Developments |
| ◇ Downs School | ◇ St John's CofE School |
| ◇ DSS Benefits Agency | ◇ Stoford Developments |
| ◇ Eden Rock Hotel, St Barts | ◇ Studley School |
| ◇ Elgar School of Music | ◇ Sun Microsystems |
| ◇ Engineering Employers Federation [EEF] | ◇ Swan Theatre |
| ◇ Etam plc | ◇ Talkback TV |
| ◇ Evesham & Pershore Housing Association | ◇ T&S Stores |
| ◇ Freshwater Estates | ◇ Taylor Clark Properties |
| ◇ Grand Metropolitan | ◇ Taylor Wimpey |
| ◇ Group 4/G4S | ◇ Thames Water |
| ◇ GSK/SmithKline Beecham | ◇ Total Oil |
| ◇ GVA Grimley | ◇ Trans-Manche Link [Channel Tunnel] |
| ◇ Halifax Building Society | ◇ Trillion Television |
| ◇ Harrods | ◇ UK Central Government |
| ◇ Health Protection Agency [HPA] | ◇ Unilever |
| ◇ Heights of Abraham | ◇ W H Smith |
| ◇ Hereford & Worcester County Council | ◇ Waterlinks plc |
| ◇ Hewlett Packard | ◇ Welsh Development Agency |
| ◇ HSBC Laiki Bank | ◇ Worcester City Council |
| ◇ Hull Health Authority | ◇ Worcester Live |
| ◇ Jaguar Cars | ◇ Worcester Rugby Football Club |
| ◇ Jaguar-Daimler Heritage Trust | ◇ Worcestershire County Cricket Club |

STUDY TOURS

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USA

Sustainable Solutions
Low Energy Buildings
High Technology Offices
Clean Environment Facilities
Industrial Facilities
Pharmaceutical R&D
Enclosed Retail Developments
Sports Stadia
High-rise buildings
Business and Science Parks
Museums and Display Arenas

HONG KONG

Commercial Office Buildings
High Quality Office Buildings
Laboratories and Industrial
Enclosed Retail Shopping

BELGIUM

Commercial Office Buildings
Industrial Facilities
Motor Car Industry
Engine Test Facilities
Museums and Display Areas

NEW ZEALAND

Geothermal Energy Solutions
Sustainable Solutions
Low Energy Buildings

HOLLAND

Low Energy Office Buildings
Wind Power
Industrial Facilities
Retail, Leisure and Sports

GERMANY

Motor Car Industry R&D
Facilities
Sustainable Solutions
Low Energy Buildings
Retail and Mixed Developments
Residential Apartments
Auditoria and Concert Halls
Museum and Exhibition Halls

AUSTRIA

Engine Test Facilities
Industrial Facilities
Commercial Office Buildings
Museums and Display Areas

FRANCE

Sustainable Solutions
Low Energy Buildings
Solar Power
Retail and Office Projects
La Defense Office Area
Commercial and Industrial
Sun-belt Business Parks

CANADA

Laboratories and Industrial
High Quality Offices
Sports Stadia
Leisure and Hotels

AUSTRALIA

Low Energy Buildings
Sustainable Solutions
Hotel and Tourism complexes
Mixed Use Developments

CYPRUS

Owner-occupier Offices
Developer-led Offices
Energy Conservation Projects
Environmental Responsibility
University and Education

ITALY

Sustainable Solutions
Solar Power
Historic Building Solutions

CARIBBEAN

Hotel and Tourism
Water-side Developments
Leisure Facilities
Township Development

TURKEY

Leisure, Hotel and Tourism
Facilities especially Istanbul,
the Bosphorus and the Black Sea
Region

THAILAND

Retail and Water-side mixed
Developments

CHINA

General Business Opportunities
Hotel, Tourism and associated
Facilities
Leisure and Transport

SWEDEN

Environmental Responsibility
Sustainable Solutions
Low Energy Buildings
Energy Conservation
Owner-occupier Offices
Developer-led Offices

MIDDLE EAST

Sustainable Solutions
Low Energy Buildings
Commercial and Industrial
Residential Townships

DENMARK

Wind Power Systems
Sustainable Solutions
Low Energy Buildings
Leisure Theme Parks
Commercial and Retail
Opportunities
Energy Conservation
Projects
Environmentally
Responsible buildings

BELARUS

Office Projects
Diplomatic & Embassy
Buildings
Commercial and Retail
Opportunities

RUSSIA

Health Clubs and Leisure
Hotel and Tourism
complexes
Office Projects
Commercial and Retail
Opportunities

NORWAY

Retail and Water-side
mixed Developments
Hotel and Tourism
complexes
Office Projects
Commercial and Retail

FINLAND

Sustainable Buildings
Wooden Framed Structures
Low Energy Buildings

PREVIOUS EXPERIENCE - SELECTED HIGHLIGHTS

GCHQ NEW COMPLEX, CHELTENHAM

New site and buildings to house the UK Government Communications Headquarters. Workplace Engineering Consultancy; Façade Engineering; Computational Fluid Dynamics Analysis; and, Conceptual Design of the HVAC Systems were all undertaken by the Firm.

TOTAL PROJECT VALUE £340M

AUDIT COMMISSION, MILLBANK, LONDON

Workplace Engineering Consultants to the Commission advising upon the vacated Labour Party headquarters at Millbank Tower, London. This 55,000sq ft refurbishment is one of the most technically demanding projects undertaken in the Capital with several innovative solutions leading to increased office productivity and well-being. The low-energy concepts employed rely upon high outdoor air rates coupled with Localised Air Filtration. The LAF concept delivers ultra-clean air in a user-controllable manner at the desk-top.

TOTAL PROJECT VALUE £7.5M

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SEVERN TRENT PLC, HEAD OFFICE OPERATIONS CENTRE, COVENTRY

Sustainability and Workplace Engineering Consultants to Severn Trent advising upon the design and procurement of their new 170,000sq ft building. In addition to authoring the Brief for the development, AWM created Sustainability concepts that ensured this project - Design, Construction and Operation - is a landmark, low-carbon development.

TOTAL PROJECT VALUE £60M

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GATESHEAD TOWN CENTRE REDEVELOPMENT

Sustainability Consultants to Spenhill/GMBC advising upon the design and procurement of this major renewal project. AWM created Sustainability imperatives which facilitated total integration of the community's energy requirements allowing creation of an Renewables Energy Services Company [ESCO] for the ongoing energy demand of the Town Centre.

TOTAL PROJECT VALUE £105M

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HPA CHRYSALIS PROJECT

Sustainability and Engineering Consultancy Services for the Masterplanning for the redevelopment of the science-based Workplace, Welfare and Amenity facilities.

TOTAL PROJECT VALUE £500M

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CHELSEA BRIDGE WHARF, LONDON

Regeneration of a mixed-use river-side site to provide: Residential, Leisure, Hotel, Office and Retail. The project required considerable experience related to Masterplanning; Sustainability & Environmental Impact Assessment; Computational Fluid Dynamics 3D-Modelling; Fire Engineering; Petroleum Act; Building Control; Wind Pattern Assessment; Acoustic Engineering; and, Value Engineering.

TOTAL PROJECT VALUE £150M

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LIVERPOOL STREET STATION RE-DEVELOPMENT

Total rebuild of this important railway station. The Firm was appointed to undertake the complete M&E Services and Systems Management, Value Engineering and Conceptual Design. In addition, all engineering systems were Project Managed by the Firm including the 1989 Section 12 - Underground Stations - Fire Precautions requirements.

TOTAL PROJECT VALUE £90M

HSBC LAIKI BANK, NICOSIA - NEW HEADQUARTERS

Appointed by the Bank to be their International Consultants advising upon the Workplace and Environmental aspects of the Bank's new Headquarters Building. The facility is a Landmark building taking into account the truly international issues that push forward the frontiers of office design.

TOTAL PROJECT VALUE £18M

ECO PARK, LUDLOW

Although intended to be adventurous, adopting a lateral thought approach to construction and materials, the development was based upon 'Best Practice with Known Technology'. The development achieved a BREEAM "Excellent" rating without capital cost increases.

TOTAL PROJECT VALUE £3M plus fit-out costs

WORLD STUDENT GAMES, ATHLETICS STADIUM

Full Olympic-standard outdoor Athletics facilities together with:

80m indoor warm-up track; full training and warm-up facilities including indoor high jump and long jump; 180,000 sq ft indoor conditioned accommodation for Competitors, Officials and Administrative Staff; seating for 10,000 Spectators; area floodlighting for 1500 lux at 6000°K - the first UK facility meeting the Eurovision colour TV standard; Telephone, Fax and Data requirements for full Press coverage. As an extension of the original appointment, the Firm were appointed to implement the Taylor Inquiry [Hillsborough Disaster] recommendations regarding all forms of communication viz radio, telephone, crowd-control, etc.

TOTAL PROJECT VALUE £23M

AUDIT COMMISSION, SOLIHULL AND UK-WIDE

Workplace Engineering Consultants to the Commission advising upon a wide range of new-build, refurbishment and FM projects to create environmentally responsible accommodation meeting the Commission's property mission statement.

TOTAL PROJECT VALUE £20M+

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CABLE & WIRELESS COMMUNICATIONS, LAKESIDE HOUSE BRACKNELL

Workplace Engineering Consultancy for the complete fitout of the old ICL European Headquarters. 90,000 sq ft of advanced accommodation to form a new Southern HQ facility for Corporate and Major Customers. Localised Air Filtration [LAF] and Personal Control minimised the need for cooling in an otherwise high IT usage building.

TOTAL PROJECT VALUE £6M [fit-out costs only]

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TRICORN HOUSE, EDGBASTON

Chosen for a total refurbishment of the 160,000sq ft office building built in the early 1970's. The sustainable solutions developed by AWM allowed a 2.5m floor-to-ceiling height to be achieved; the suspended ceiling being 80mm and the raised floor being 175mm. The successful concepts created allowed the frame and envelope of the building - that would otherwise be demolished - to be retained. A truly sustainable outcome that saved over 8-years' worth of operational energy embodied in the retained structure.

TOTAL PROJECT VALUE £20M refurbishment

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QAC LEARNING CENTRE, BIRMINGHAM

New sustainable, low cost-in-use learning centre for students with visual impairment. This project required considerable integrated design skills to ensure the building acted as a primary environmental moderator. hydrobath modelling allowed effective prediction of air movement and thermal comfort allowing heat to be regained in winter and stack-effect ventilation to remove heat in summer. An efficient heating system with E-Stack-effect ventilation was developed in conjunction with the University of Cambridge. This concept allows minimum running costs which have been monitored post-occupancy to prove over 60% heat-energy savings.

TOTAL PROJECT VALUE £5.5M

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AQUEOUS, BIRMINGHAM

New 125,000 sq ft office development designed to create an environmentally responsible building whilst addressing the needs of modern office 'dwellers'. The Client, Taylor Clark Properties, required the production of a flexible, advanced office building that would respond to the changing needs of corporate tenants. Andrew Wilkes Management were appointed to undertake the creation of an accommodation strategy from which the overall design was developed.

TOTAL PROJECT VALUE £8.25M

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CHALFONT PARK, BUCKINGHAMSHIRE

350,000 sq ft office development in a prestigious parkland setting formerly occupied by Alcan.

TOTAL PROJECT VALUE £17M

SWAN THEATRE WORCESTER - REFURBISHMENT

The Swan Theatre in Worcester is an important Community Theatre built in the 1960's. Owned by the City Council, the Theatre has undergone a renaissance of success under the direction of Worcester Live. Total refurbishment of the Theatre was completed in 2009. The works Designed and Project Managed by the Firm include: re-cladding; re-roofing; new low-energy thermal comfort systems; new seating; refurbishment of ancillary spaces such as Lavatories & Reception; and, redecoration.

A design for the replacement of the adjacent Swan Studio complex is currently underway which will double the space available for community and youth workshops including rehearsal spaces and small group working areas plus a 100-seat studio theatre.

TOTAL PROJECT VALUE £2.8M

KINGS COURT OFFICE DEVELOPMENT, WORCESTER

New 120,000 sq ft prestige HQ office accommodation for corporate tenants to occupy such as WS Atkins and Reality Group.

TOTAL PROJECT VALUE £6.25M plus fit-out costs

BANK OF IRELAND HQ, DUBLIN

Appointed by the Bank to be the Sustainability Consultant for their new Headquarters Building.

CARPHONE WAREHOUSE

Commissioned to advise upon all aspects of Sustainability and low Ecological Impact for the refurbishment of a 400,000ft² former cotton mill. In addition to CFD Analysis and Computer Modelling of the accommodation, an ultra-low carbon footprint concept was developed in conjunction with the University of Cambridge.

CITY OF BIRMINGHAM SYMPHONY ORCHESTRA HEADQUARTERS AND MUSIC CENTRE

New Headquarters Office Facility and Rehearsal Hall for the City of Birmingham Symphony Orchestra designed to exacting environmental and acoustic standards. The Rehearsal Hall needed to augment the outstanding performance home of the Orchestra - Symphony Hall, part of the International Convention Centre in Birmingham. In addition 3No digital-quality Recording Studios and other sensitive areas required exacting acoustic performance. The Offices and ancillary accommodation, wrapped around the performance spaces, required a flexible approach to thermal comfort, lighting and humidity control.

The Rehearsal Hall has been conceived using a displacement ventilation system without the need to artificially cool the incoming air. AWM used the first UK application of a Computational Fluid Dynamics-Virtual Reality programme and the project underwent a full CFD analysis to establish comfort levels and temperature conditions. This included a CFD-VR 'walk-through' model of the Hall showing temperature, air-movement and pollutant density levels in real-time. In addition, the south-facing elevations of the building were CFD-modelled allowing the development of a 'third-skin' solution, further negating the need for air-conditioning.

TOTAL PROJECT VALUE £5.5M

GROUP 4 THEATRE AND PERFORMANCE CENTRE

The creation in an extremely sensitive conservation area of a 100-seat auditorium using displacement ventilation. In addition, the ancillary accommodation has been designed to minimise the mass of the building envelope. The Firm were appointed to undertake the Acoustic Engineering aspects as well as the M&E Services. This combined approach resulted in the mechanical and electrical plant and equipment being separately located from the auditorium building lessening the effects of noise transfer and harmonic distortion hum.

TOTAL PROJECT VALUE £3.5M

WOODLAND GRANGE LECTURE ROOMS AND TRAINING CENTRE

An extension to the existing facilities to provide state-of-the-art lecture rooms and training areas. The spaces needed to be created for excellent sound quality as well as very low energy usage. The air distribution to provide thermal comfort is delivered through the floor and extracted at high level which uses outdoor air temperatures at high volume and low cost.

TOTAL PROJECT VALUE £4.5M

DORMY HOUSE HOTEL, BROADWAY

Refurbishment and Extensions to this country house hotel in the Cotswolds to create a multi-purpose entertainment and conference suite. The project was undertaken on a Management Contracting basis with AWM taking full responsibility for Design, Construction and out-turn Costs. The accommodation included a new Orangery doubling the size of the available space. By placing the proper emphasis upon Client Expectations, the Firm was able to deliver an exemplary facility within budget that has received plaudits from Guests and Hotel professionals alike.

TOTAL PROJECT VALUE £1M

FURNIVAL COURT OFFICE DEVELOPMENT, SHEFFIELD

New 150,000 sq ft prestige HQ office accommodation for corporate tenants that include National Training Partnership and Halifax Building Society.

TOTAL PROJECT VALUE £5M plus fit-out costs

CHANNEL TUNNEL TERMINAL, FOLKESTONE

Project Management and Value Engineering of the M&E Services for TML at this large facility on the UK side of the Channel Tunnel.

TOTAL PROJECT VALUE £240M

HERITAGE MOTOR CENTRE, GAYDON

Offices, Archives, Workshops, Conference/Seminar facilities and tourist destination originally funded by the Rover Group for the British Motor Industries Heritage Trust (BMIHT) to house and display the considerable number of motor vehicles that made up the BMIHT Collection previously on show at Syon Park, London. This award-winning 120,000 sq ft building has a 50,000sq ft exhibition hall for the display of motorcars and for product launches. In the exhibition hall, a displacement ventilation system was selected in preference to comfort cooling to save capital and revenue costs whilst improving the environmental conditions. The lowering of energy cost has been the subject of much praise whilst the filtration of incoming air has substantially reduced the need for cleaning the exhibits and high-level structure.

TOTAL VALUE £10m

PRINCESS ROYAL SPORTS ARENA, BOSTON

Combined Athletics Stadium and Rugby Stadium with specialist concentration on disabled persons' inclusivity, funded under the auspices of the Disabled & Able Bodied Sports Initiative [DABSI]. In addition to the IAF athletics track and field events' provision, the facilities include Club Pavilion, Indoor Training Pavilion, Sports Injuries' Clinic, Health Centre - including swimming pool and associated facilities.

TOTAL PROJECT VALUE £8M

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PRINCIPALITY BUILDING SOCIETY HQ, CARDIFF

New 130,000 sq ft prestige HQ office building.

TOTAL PROJECT VALUE £12M plus fit-out costs

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VOISKOVOY LANE OFFICE DEVELOPMENT, MINSK, BELARUS

Appointed to undertake a major office redevelopment in Minsk.

TOTAL PROJECT VALUE \$4M

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BRINDLEYPLACE, BIRMINGHAM

Masterplanning of Workplace Engineering Strategy; Fitout for Grimley to Building Three; Project Audit to Building One; Advice to Argent on BT Building Two

TOTAL PROJECT VALUE £65M

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KESA PLC - COMET RDC, SKELMERSDALE

New 350,000sq ft Warehouse, Distribution and Office facility creating a Regional Distribution Centre for this European Electrical Retail company [Comet, Darty etc]. The site location was in a sensitive location and AWM were additionally appointed to undertake the Environmental Impact Assessment and Sustainability Planning Consultancy. In addition to the offices and high-bay storage areas, AWM were responsible for the site infrastructure and the off-site utilities.

TOTAL PROJECT VALUE £17M

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RANDOM HOUSE - TIPTREE BOOK SERVICES, ESSEX

New 500,000sq ft Book Warehouse, Sorting, Distribution and Office facility creating a new European Hub for the largest Book Distribution company in the UK.

TOTAL PROJECT VALUE £26M

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MOOG CONTROLS MANUFACTURING FACILITY, BANGALORE,

New manufacturing facility for Aerospace and high precision control equipment. Accommodation includes clean environment and specialist computer installations as well as manufacturing areas and offices.

TOTAL PROJECT VALUE £10M

JAGUAR CARS, BIRMINGHAM

Creation of a facility to launch new concepts emanating from Jaguar Cars. The first project so launched was the X200 mid-sized car and the work was critical to the rest of the X200 programme.

TOTAL PROJECT VALUE £3.3M

JAGUAR HERITAGE TRUST, COVENTRY

New Museum for the Jaguar Daimler Heritage Trust to house the offices, archives and display area for the significant collection of historic cars owned by the Trust.

TOTAL PROJECT VALUE £1.8M

ENGINE TESTING AND RESEARCH FACILITY, PARIS

Feasibility Study and full costing for the creation of one of the most advanced facilities of its type in the world.

TOTAL PROJECT VALUE £35M

MIRA, ATHERSTONE

New Corrosion Soak Testing facility for Motor Car accelerated corrosion resistance testing.

TOTAL PROJECT VALUE £0.3M

AMTRAK DISTRIBUTION CENTRE, WEST MIDLANDS

Refurbishment of 150,000 sq ft existing warehousing.

TOTAL PROJECT VALUE £5.0M

BISLEY OFFICE FURNITURE FACTORY, NEWPORT, GWENT

300,000 sq ft extension to this modern manufacturing facility.

TOTAL PROJECT VALUE £5.0M

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SMITHKLINE BEECHAM, UPPER MERION, NEW YORK

Design of Laboratories and associated manufacturing facilities at the Upper Merion Complex.

TOTAL PROJECT VALUE \$4.2M

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SCHERER DDS, SWINDON

Value Engineering exercise for a new drug delivery system manufacturing facility. TOTAL PROJECT VALUE of the project was in excess of £12m with a VE saving of £2.3m eventually achieved.

JANSSEN PHARMACEUTICALS, BELGIUM

Project Management, Value Engineering and Cost Planning/Control for the M&E Services aspects to a new Animal Sciences and Research Laboratory with a project value of £75m.

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WEST MERCIA POLICE HEADQUARTERS, WORCESTER

New Forensic Science Laboratories and CID Headquarters for West Mercia Constabulary.

TOTAL PROJECT VALUE £6M

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BRITISH TELECOM BILLING CENTRE, CARDIFF

Refurbishment of an existing major Computer Suite to form a Print and Dispatch Facility.

TOTAL PROJECT VALUE £4.0M

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HULL ROYAL INFIRMARY

The largest Dual Magnetic MRI Scanner Installation in Europe.

TOTAL PROJECT VALUE £20M

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SKI SLOPE USING 'REAL' SNOW

New Skiing facility for a major tourist resort in Malaysia.

TOTAL PROJECT VALUE £5M

SWIMMING POOL AND HEALTH SPACE

New swimming pool, sauna, Jacuzzi and health area as an extension to a 19th Century country house.

TOTAL PROJECT VALUE £1.5M

JUBILEE UNDERGROUND LINE, LONDON

Value Engineering of the M&E Services to part of this major Civil Engineering Project.

PODISATION OF STUDENT ACCOMMODATION

Prototype Design/Specification of a new concept in providing Student Accommodation.

TOTAL PROJECT VALUE £20M

KNIGHTSTONE HOUSING ASSOCIATION, TAUNTON

Refurbishment of large sheltered accommodation complex.

TOTAL PROJECT VALUE £2M

CHARLES STREET, MAYFAIR

Prestigious Grade I residential refurbishment in an important and sensitive location. In addition to the refurbishment of the Main and Staff Quarters, a 25m swimming pool and health suite was created within a newly formed subterranean void 18m below street level.

TOTAL PROJECT VALUE £7.5M

PARK STREET, MAYFAIR

Residential refurbishment in an important location.

TOTAL PROJECT VALUE £3M

PRIVATE APARTMENT, MONACO

Prestigious residential refurbishment of 4No separate apartments into one large residence.

TOTAL PROJECT VALUE £5.5M

PRIVATE APARTMENT, MONACO

Technically demanding M&E Services to a luxury residence overlooking the harbour.

TOTAL PROJECT VALUE £11M

PRIVATE VILLA, ST JEAN CAP FERRAT, FRANCE

Total refurbishment of the former home of David Niven.

MAXSTOKE LANE RESIDENTIAL DEVELOPMENT, MERIDEN

Residential refurbishment integrating renewable technologies within designs and construction together with advice to prospective purchasers. Each dwelling will save even more quantities of carbon emissions in operation - providing the most appropriate technology is chosen - as the community reflects a less profligate lifestyle. This educational task was held as a priority when creating truly sustainable homes and greatly influenced the Planning process.

ROYAL NATIONAL COLLEGE FOR THE VISUALLY HANDICAPPED, HERFORD

The design and Project Management of a new low energy environmental conditioning system to the Queens Building. The project was undertaken for 20% of the original expectation when AWM were appointed. The original brief was to lower the summertime temperatures due to the refurbishment of the old accommodation to form open-plan Computer Learning spaces. The solution derived by AWM incorporated revised fenestration, push/pull ventilation and an 'Effective Draught Temperature' air movement system.

TOTAL PROJECT VALUE £11K

MOD ABBEYWOOD, BRISTOL

Appointed as Consulting Engineer to survey, report, evaluate, recommend and rectify the recently completed Design & Installation of the complete HV/LV Systems - including Standby Generation - throughout the whole site. The Firm was responsible for the complete redesign, setting, testing & commissioning of this major electrical system extending to an 18-month activity.

GENERAL HOSPITAL, UK

Full Services Survey Report and Energy Feasibility Study based upon waste steam generation and steam reciprocating engines. The generation of electricity by these means formed part of a co-generation installation that did not meet operational expectations.

JOINT EXPERT WITNESS

Appointed by the Court to act as a joint expert witness in the case of a private individual vs. a Housing Association. The case involved the failure of a Residual Current Circuit Breaker and nuisance tripping. The technical aspects required analysis of the relevant British Standards and Testing Procedures.

GWENT POLICE HEADQUARTERS

Report and Investigations into the suitability of the CHP/Emergency Generation Systems giving recommendations for the remedial work to conform with the Police Authority's requirements.

PHARMACEUTICAL R&D FACILITY, PHILADELPHIA, US

Arbitration and Technical Guidance for rectification of environmental problems relating to pharmaceutical research and development laboratories in the United States of America.

AIR MOVEMENT ANALYSIS, SIMULATION AND MODELLING

The CFD-VR and Hydrobath Modelling techniques pioneered by the Firm have proved highly successful in establishing air movement philosophies within a whole variety of Project types.

Apart from the significant energy savings that result from such sophisticated analysis, the benefits to users by way of improved air movement and better diffusion of fresh air, create healthy working environments leading to significant office productivity improvements.

The application of such modelling techniques is a relatively recent innovation and there is a limited number of organisations with a depth of experience of interpreting the results of such activity. Andrew Wilkes, however, established a Practice Philosophy that every project involving critical air movement should be modelled to assess the environmental impact, both internally and externally. Until recently this could only be established by cumbersome and confusing mathematical modelling. In fact, the latest modelling approaches enable AWM Engineers to effectively display results to lay-Clients.

It is against this substantial background that Andrew Wilkes Management are able to proffer modelling design services to a whole range of Clients.

MESO-CLIMATE ANALYSIS

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For an overseas University project that drew upon the considerable Research and Development activity carried out by the Firm. The use of deciduous trees external to the buildings and the application of high-transpiration foliage within the atria, created a naturally cool and calm environment in summer whilst allowing the winter sun to reduce energy for heating. Other, similar studies are frequently being carried out by the Firm.

ALTERNATIVE FUEL SOURCE STUDY

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This project, undertaken in 1988 involved the use of willow trees to provide a fuel source for heating and hot water. The ecological balance of the system was paramount. The variety of willow chosen was fast growing and allowed one crop per year so that the source is sustainable. In addition, the combustion products are sulphur-free and provide CO₂ into the local climate to enhance growth whilst the O₂ given off by the willow balances the cycle.

It is incredible that 20-years later this idea, now dubbed 'biomass' is considered novel and a platform to "save the planet"

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POWER FROM THE WIND

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Andrew Wilkes undertook his Final Year Thesis in 'Power from the Wind. The basis of the Thesis was for large-scale electricity generation and storage. Since that time, he has undertaken several projects for small-scale solutions - predominantly for Clients in the UK.

The key issues to be assessed when contemplating a wind generator solution, are the availability and consistency of the wind in locality and a comparison with the actual electricity demand profile.

The Firm is regularly undertaking such considerations for a whole range of Clients and applications but now the advanced thinking is still considered state-of-the-art.

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JAPANESE OFFICE DESIGN

Unique conceptual design using authoriser/interpreter philosophy and personal workstation control of the occupants' micro-environment.

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BRITISH RAILWAYS CONTROL CENTRES

The use of CFD for the detailed design of the meso-climate impact and the internal environmental modelling.

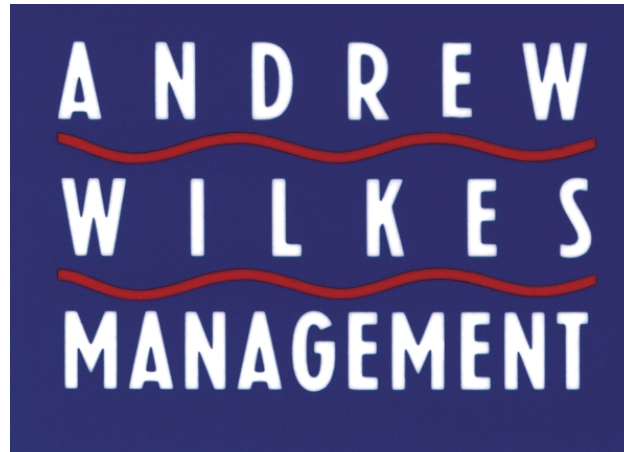
SEAWATER GREENHOUSE FOR ARID LANDS

Engineering Conceptual Design for a series of ecologically and environmentally sensitive projects using deep sea temperatures to create potable water for use in horticulture in hot, arid regions. The greenhouse operated as a still while providing a controlled environment for the production of plant food. A bi-product of the process was cool air as well as 40litres per square metre per day of distilled water. This project was financed by the European Community.

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