## **DESIGN PROJECTS**

#### DAVID JUKES-HUGHES RIBA MRAIC

#### Offices

- Houses of Parliament, Central Government Offices, mixed use development and new landscaping, Tiananmen Square, Peking, PRC (1997-2007): Outline Proposals (RIBA Stage A to C): Self financed design project. 300,000 s.m. GFA. Site area of 104 ha. Building cost estimate (superstructure only): US\$315M. (Potential end user: CPGPRC.)
- Customer Call Centre for British Telecom PLC, Truro, UK. (2003): upgrade
- National Software Park, Zhongguancun, Dongbeiwang, Haidian District, Beijing Experimental Zone, PRC (2000). Design Competition for a new science and technology park in the heart of China's "Silicone Valley." The project called for 450,000 s.m. GFA on a site area of 142 ha.
  - David prepared concept designs for the building envelope using low energy design. Strategies for heat conservation and thermal stabilization included the use of intelligent glass facades ("climate active walls"), good insulating materials, high thermal mass for night-time radiation and winter heating, a south facing aspect and a green-house heat sink for maximizing solar gain. For low energy cooling during the hot summer months suggested strategies included the use of rotating blinds and deciduous trees for shading, natural ventilation for night-time cooling and chilled ceilings for the day-time. For on site power generation, photovoltaic solar panels and wind turbines were also proposed.
- Cyberport C2/3 Office, Telegraph Bay, Hong Kong, (2000). 92,600 s.m. GFA, plus parking spaces & 14 lorry loading bays. The project aims to establish Hong Kong as a major IT competitor within the Asia region. Completion 2003. David liaised with the design architects, on space planning & building regulation checking.
- Government Centre for Investment, Fort Bonafacio, Manila, Philippines. (1999) 46 storey office tower, 25 storey hotel, 770 car parking spaces and 23 lorry loading spaces. Total GFA: 133,000 s.m. A one-stop shop for all government services involved in the process of attracting and managing foreign direct investment throughout the Philippines. David assisted the design director with design drawings and technical paper for this short listed design competition entry.
- Research / Development and Administration Centre, Longgang, Shenzhen County, PRC. (1999). 3no. 7 storey R&D buildings, 21 storey administration building, 3 storey canteen building, and 2,200 parking spaces. Total GFA: 304,000 s.m. Completion: 2002. David prepared details for the external wall package.
- Rockwell Centre, Plots 3 & 4, twin office towers, Manila, Philippines, (1998). 2 no. office towers (28 storeys), 41,700 s.m. GFA. David prepared design proposals for the scheme design under the direction of the design director.
- Office Towers, Kuala Lumpur, Malaysia. (1997). Two 15 storey office towers on a 2 storey podium, 51,000 s.m. GFA. Cost estimate: US\$77M. David assisted with the design

development.

 One Canada Square (DS 7), Canary Wharf, London, UK (1989-90): 50 storey office tower, 245 metres (800 feet) high, 130,000s.m. GFA. Completed 1991. For a year and a half, during the construction phase, David worked for the executive architects, on this well-known docklands development.

In his role as assistant to the project architect, David carried out the following tasks: revisions to contract drawings and specifications to suit changes by the design architect, the issue of Architects Instructions to the main contractor, answering site questions, checking shop drawings, managing drawing issues and keeping project records. In addition, he assisted with design co-ordination in a number of key areas. These included lobby security, disabled lift installation, curtain wall revisions, firewalls, ratings and compartmentation, roller shutters, finishes, water tank design, structural steel fire and weather protection and other misc. matters.

- Place Nouveau Office Tower, Yonge Street, Toronto, Ontario, Canada. Hard landscape detailing. Cost: N/A. Completed 1988
- Office Fit Outs, Greenford, London, UK. GFA: 450-750s.m. Cost: varies. Completed: 1986 & 1988. Space planning & interior design.

#### **Transport**

- New Signal Centre, Portsmouth, UK (2004): For Network Rail.
- Dublin Metro (Phase 1), Ireland, (2003): Phase 1 of this new commuter railway is 12 km long, has 12 stations, and links Dublin airport with the city centre. Six stations are underground.
   David provided design input and advice on current regulations and standards during the feasibility stage and on the following specific stations: Tara Street and Mater Hospital.
- Metropolitana "Pedemontana", Catania, Sicily (2002): The Etna Mountain Metro is a 31 km extension to an existing underground commuter railway. The new line will include 18 new stations. David provided concept designs in CAD for generic (underground) stations for inclusion in the "preliminary" stage submission to local government. Three standard types were developed with varying amounts of retail. Both Island and side platform arrangements were also included.
- Dubai Transit, UAE (2002): Dubai city plans to build a new (elevated) commuter railway with over 30 stations. David assisted with design proposals for a typical station for inclusion with a short-listed tender bid for (RIBA Stage D) consultancy services. An "oasis" theme was developed within a dome type structure. David prepared CAD design drawings and conceptual sketches.
- King's Cross Thameslink Station (KXTL), London 2000 (2002): During 2004 CTRL related construction at St. Pancras Station will cause a 25 week blockade of the Thameslink line. KXTL Station will become a temporary terminus serving the southern portion of the line. As project architect, David has prepared a definition report with an outline scope of works. The report included an assessment of previous reports, a check of existing facilities against government planning standards and guidelines including M/E provisions, a review of passenger flow dynamics including revised signage needs, escape calculations, a design risk assessment and a construction risk assessment.

- King's Cross Station, New Platform 0, London. East Coast Mainline Upgrade (2002): David was project architect on a multi-disciplined design team, lead by railway engineers, responsible for a Level 4 design study (RIBA Stage D). He was tasked with developing outline architectural designs for a new platform (for Type 373 trains) located beneath the East Side Office building. The design included proposals for platform metal ceilings, a new footbridge and platform canopy and options for new retail facilities. A final outline project report included design justifications, a risk assessment and an assessment of existing and new facilities against current standards. The study forms the basis for detailed design costing, D/B tender documentation and a planning application for this important Grade 1 listed building.
- Dublin and Suburban Enhancement Project (DASH), Ireland, (2002): Upgrade of 32 existing (DART) railway stations to take longer trains, and improve passenger safety. David prepared scheme and detailed design proposals and CAD drawings for works at four stations to RIBA Stage D: Black Rock, Howth Junction, Dunleary, and Tara Street; and typical footbridge.
- Property Development Study, Yuen Long Station, West Rail Phase 1, KCRC, Hong Kong. (1998-2000): The project consists of a 2 level commuter railway station, 10 residential towers, 25 to 43 stories, a local shopping arcade, bus transit center, and interface with an existing terminal tram station. Domestic GFA was 155,000 s.m. and non-domestic was GFA 15,000 s.m. Cost estimate: US\$333M. Completion: 2005. The study included planning submission for Town Planning Board approval.

David acted as project design architect on this major infrastructure project and inter-modal interchange for two years. He prepared design proposals for review by the client and a large consultant team. Options were developed within the physical constraints of the site, the track alignment and other railway constraints, and the planning requirements set by government. Proposals were tested for financial promise by property advisers and costed by surveyors, and a final design was chosen. David contributed to the preparation of planning documents by specialist planning advisors. He also co-coordinated the scheme with engineers on the consultant team, as well as the detailed designers for the railway works. David prepared initial design reports, property definition drawings, and contributed to the preparation of property development control documents, which included structural loading schedules. These documents will be used for tendering for JV development.

- Tender Submissions for Consultancy Services on the KCRC West Rail and East Rail Lines (1997-2000): David has prepared fee bids, including technical papers and concept design proposals for a number of railway stations, and their related property developments.
- Property Development Study, Kai Tak Station & Depot, North Island Line/East Kowloon Line. Feasibility study, for the MTRC, Hong Kong. (1998): Approx. domestic GFA: 350,000-700,000s.m. Estimated completion: 2010. Following the relocation of Hong Kong International Airport (HKIA) to Chek Lap Kok, the Kai Tak Airport site was made available for property development. Under the direction of the design director, David prepared outline designs for basic property development schemes. These were used by the MTRC to assess the development potential of the site in relation to plot densities proposed by government. The new NIL/EKL line is proposed to run across the site. Special attention was given to sites above the new MTR railway stations, and linkages to adjacent property sites.
- Railway Link Feasibility Study for Cathay Pacific Airways (CPA), Chek Lap Kok, Hong Kong

(1994): Following the relocation of HKIA from Kai Tak to Chek Lap Kok, CPA wished to relocate their headquarters to the new airport. As part of an overall site investigation, CPA wished to assess the potential of a site adjacent to the cleaning platform at the end of the Airport Express line. The aim was to use the platform as an exclusive station for use by CPA staff. Additional costs would be necessary and these would need to be shared by both MTRC and CPA. In order to establish what these would be, David prepared a report with costed design proposals. A number of station types were investigated, including Island and side platforms.

• Lantau & Airport Railway, Tsing Yi Station, & Operations Control Centre, MTRC, Hong Kong. (1992-98): The building consists of a 6 storey podium with railway station, 47,000 s.m. GFA shopping centre, and 12no. 40 storey residential towers with 249,000 s.m. GFA. Completion of station July 1998. Cost: US\$820M. Tsing Yi Station is one of 4 major inter-modal interchanges along the new LAR line. It includes an express rail, a commuter rail, taxi drop-off and pick ups, hotel limo facilities, inter-urban, airport and cross border bus interchanges, and extensive car and lorry parking. The project has a number of interesting noise mitigation measures, including both rail and road noise canopies.

David worked as both a design and project architect nearly full time for 5 years on all aspects of this major infrastructure project from inception through to completion. He assisted the team leader with project management and the design director with design proposals, passenger flow and escape calculations, detailed design, government submissions, consultant coordination, contract documents and specifications, NSC packages for stonework, metal cladding and specialist metal work, tender review, shop drawing review & site liaison. David was directly responsible for the interior design of the Operations Control Centre, when it was added to the brief.

 Docklands Light Railway Station and Shopping Mall, Cabot Place (RT 1), Canary Wharf, London, UK. (1988): 3 storey building with 15,000 s.m. GFA, completed in 1991. David prepared working details for the external stonework NSC package (for the executive architects, Adamson Associates Inc.)

#### Residentia

- Windsor Arch. Macao, China. (2008). 10 no. 40 storey residential towers on a 3 storey car park podium deck.
- Departmental Quarters at Lai Chi Ling Road, Lai King, Hong Kong, (2000). 56,750 s.m. GFA, 610 residential flats, plus car parking spaces and common recreational facilities.
   Design/Build. David assisted with the design development. Completion 2002.
- Sandwich Class Housing Project, Tseung Kwan O, Area 67, Hong Kong. (1998). 2 storey podium with 11no. 40 storey residential towers, with 239,200 s.m. domestic GFA & 3,000s.m. non-domestic GFA. Cost estimate: US\$330M. Master plan & scheme design.
- Wisma Perak Residential Tower, Kuala Lumpur, Malaysia. (1997). 35 storey private residential tower with 16,000 s.m. GFA. Cost estimate: US\$38M. Scheme design.
- Domestic House Extensions, UK: Approximate cost: US\$60,000 each. Completed: 1988.

#### Retail

Beaver Lumber Store, St. Albert, Alberta, Canada. (1988). New build one storey warehouse

type building. 2,500 s.m. GFA. Cost: US\$6M. Completed: 1991. Working drawings.

- Beaver Lumber Store, Toronto, Ontario, Canada.
   Alterations & additions. Cost: US\$120,000. Completed:1989. Working drawings.
- K-Mart Store, St. Catherines, Ontario, Canada. New build one storey warehouse type building. Alterations & additions. Cost: US\$120,000. Completed: 1989.

#### Hotels

- Xuzhou Resort Development, PRC. (1998)
   Hotel master plan, 300 room hotel, residential and retail development. Design development.
- Hotel, Public House and Italian Restaurant, Guildford, UK. Alteration and addition. Cost:
   US\$380,000. Completed 1992. David provided a scheme in a Classical style to suit the Italian
   theme. He also completed all working details and lighting design, liaised with the client,
   builder and consultants, and reviewed the work on site during the construction phase.
- Hotel Extension, UK.
   Two storey extension. GFA: 900 s.m. Cost: US\$200,000.
   Completed: 1986. Working drawings & schedules.

#### **Industrial Facilities**

- Bodega Tower Warehouse, Manila, Philippines. (1997).
   17 storey godown, 100,000 s.m. GFA. Cost estimate: US\$64m. David assisted the design director with proposals for this unsual building type. The building was designed to meet earthquake loading.
- Cathay Pacific Catering Building, Chek Lap Kok, Hong Kong. (1994). 3 storey food processing building, 50,000 s.m. GFA. Completion: March 1998. Cost: US\$179M. Assisted the design director with the preparation of a concept design & outline brief. This was later used for competitive tendering for (detailed design) consultancy services.
- Pharmaceutical Factory, Bandung, Indonesia. New build two storey facility. GFA: 2,000s.m. Approx. cost: US\$5M. Scheme design. (1988).
- Pharmaceutical Factory, Taiwan, China. New build scheme design (1988).
- Laboratory upgrades, Greenford, London, UK. Completed: 1986

#### Healthcare

- Healthcare projects for care in the community & St. David's Hospital Learning Disability Unit-NHS Trust, Wales. (2003)
- Pok Oi Hospital Redevelopment and Expansion, N.T. Hong Kong Area (2000): David prepared a technical paper, design proposals and fee bid for this short-listed tender for consultancy services.

#### **Education**

 Sculpture Proposal: "The Monument to the Third International," in bamboo, Hong Kong (2006-7) to RIBA Stage D / MRAIC Phase 1: A self financed position paper, for possible implementation by HKU and CUHK.

- New High Risk Research Laboratory Building, The Chinese University of Hong Kong (CUHK), (2000): Prepared sketch proposal, technical paper and fee bid.
- Art Studio for a School, Weybridge, UK. Alteration. Cost: US\$130,000. Completed: 1989
- Main Entrance Renovation for a School, Weybridge, UK. Cost: US\$64,000. Completed: 1988

## **Religious Buildings**

Congregational Church, Kelly Street, London NW1, UK. New build project. Cost: US\$1M.
 Completed 1989. Design development & contract drawings.

#### Leisure

- "City of Dreams", Macao, China. A casino, shopping centre and hotel complex. David assisted in the preparation of working drawings and reviewed sub-contractor's shop drawings and materials submissions. 2008.
- Ski hut extension. Smithers, British Columbia, Canada. 2007.
- Restaurant, North Cheam, London, UK. Alterations & additions. New kitchen and second stove. Prepared layout plans. GFA: 100 s.m. Completed: 1986.

## Design Projects presented to the School of Architecture, Kingston University, UK.

#### **Masters Degree**

- Art Gallery for John Constable. Tate. Millbank. London. UK. MA Thesis.
- Primary Healthcare Centre, Mile End Road, London, UK
- A shelter, a wall, a steam bath, a place for surveillance and a place for contemplation.
   Fountain Court, Middle Temple, London, UK
- Optical Science Institute, Gordon Street, London WC4, UK
- A Dance Centre, Camden, London, UK.
- A multi-storey House, Hampstead Ponds, London, UK (In the style of Alvar Alto.)
- Sketch book 1989: The Architecture of Istanbul

#### **Bachelors Degree**

- A Garden Wall on the Edge of Hampstead Heath , London, UK
- A Riding School on Wimbledon Common, London, UK
- A Recording Studio at Grenville Street, London, UK. (In the style of Louis Kahn.)
- A House in Hampstead, London, UK.
- A Gatehouse, Gateway and Wall.
- A full size footbridge constructed using timber railway sleepers: Span 5 metres. At the School
  of Architecture.
- A Museum for Venetian Historical Artifacts, Venice. (In the style of James Stirling.)
- Generic House Designs.
- A Pavilion.
- A Monument, Uzes, France.
- An Art Gallery for Hockney & Caro, London Docklands.
- Two Houses.
- A Gateway (to Architecture). A model and drawings.

• An Architectural Model of a Painting. (Painting by De Chirico.)

# Art work presented to the School of Visual Arts, the University of Lancaster, UK Bachelors Degree

• Various pieces of figurative sculpture: maquettes and life size work.