CURRICULUM VITAE: BRETT STUART

BE Elec, Post Grad. Dip. Management

36 Seafoam Close Phone: 0414 869 871

Varsity Lakes, Gold Coast, Qld. 4227 Email: brett@stuartconsulting.com.au

Qualifications & Professional Affiliations:

- Bachelor of Engineering, Electrical (Univ. of Qld), 1983.
- Post Graduate Diploma in Management (Deakin Univ.), 1992.
- Member of Institution of Engineers Australia (Membership No. 262457), and Chartered Professional Engineer (CPEng).
- Registered on National Professional Engineers Register Section (NPER-3), Electrical College.
- Registered Professional Engineer of Queensland (Registration No. 3077).

Skills and Software:

Electrical Engineering Design:

- 1. Power Distribution, and Controls.
- 2. Energy Management.
- 3. Building Management & Control Systems for Site / Energy Management
- 4. Lightning & Surge Protection.
- 5. Limitation and control of Harmonics in Power Systems.
- 6. Power Factor Correction.
- 7. Communications Cabling including Fibre Optic Cabling, and designing Data Cabling Infrastructure to suit data network equipment.
- 8. Generator Standby Power.
- 9. Lifts.
- 10. Internal Lighting and External Floodlighting.
- 11. Emergency Lighting.
- 12. Electronic Security.
- 13. Fire Detection & Alarm Systems.
- 14. Emergency Warning & Evacuation Systems.
- 15. Compliance of Electrical Services with the Building Code of Australia (BCA).
- 16. Cost Management to fully estimate and control electrical project construction costs.
- 17. Life Cycle Costing, to fully appraise alternatives with various Initial and ongoing Annual Costs.

Project Management:

- 1. Project Management skills of managing individual major projects from inception to completion.
- 2. Financial Management skills to manage the above within budgetary constraints.
- 3. Client Management skills to negotiate realistic outcomes within budgetary and time constraints.
- 4. Contract Management skills, to choose appropriate conditions of contract, administer contracts during construction, and act as Superintendent's Representative under the contract.

Facilities Management:

- 1. Time and Productivity Management skills to manage some 30 Trade and Supply contracts, meeting the needs of 350 tenants in 2 buildings.
- 2. Reporting skills to keep the client completely informed on the status of every Facilities Management task via Microsoft Outlook.

Managerial:

 Human Resource Management skills, to lead an enthusiastic team of Electrical & Mechanical Design Professionals.

- Program management skills of controlling typically 20+ live projects.
 Financial Management skills to resource the above in a commercially viable manner.

Software:

Category		Software Owned	Capability	
Offic	e			
0	Spreadsheets:	Microsoft Excel 2007	Expert User	
0	Word Processor	Microsoft Word 2007	Expert User	
0	Email	Microsoft Outlook 2007	Expert User	
Proje	ect Management			
0	Project Management	Microsoft Project 2002	Expert User	
0	Personal Info Management	Microsoft Outlook 2007	Expert User	
In-House Developed Software				
0	Electrical Engineering Calcs	Visual Basic for Applications (Marcos for Excel)	Expert User	
Cont	ent Creation			
0	CAD Drawings	AutoCAD 2008	Expert User	
0	Internet Web Pages	Adobe Dreamweaver CS3	Capable User	
			(refer www.stuartconsulting.com.au)	
0	Desktop Publishing	Adobe InDesign CS3	Capable User	
0	Graphic Design	Adobe Photoshop CS3 (raster images,	Competent User	
		photo editing)	Canabla Usar	
	E1 (Adobe Illustrator CS3 (vector images)	Capable User	
0	Electronic Publishing	Adobe Acrobat Professional 8.0	Expert User	

EMPLOYMENT HISTORY:

Stuart Consulting Pty Ltd

01-07-2001 to present: Managing Director and Senior Electrical Engineer

Firm's Address: 36 Seafoam Close, Varsity Lakes, Qld 4227 (Gold Coast)

Contact: Brett Stuart, Managing Director, Qld, Ph 0414 869 871

Industry and Description of the Business: Design and procurement of Electrical Engineering Services in

Building Construction / Refurbishment.

Project Management

Clients / Projects

Client: Global Facilities Management

February 2004 to Current.

Project Management for:

1. Brisbane: 420 George St (15 storey + 2 Basements): Cost at Site: \$7.2M

a. Whole building Base Building upgrade,

b. Fitout for Qld Transport 13 storey's.

Electrical Engineering Design & Supervision:

1. Brisbane: 420 George St (15 storey's. + 2 Basements): Elec Cost: \$0.8M

a. Whole building Base Building upgrade,

b. Fitout for Qld Transport 13 storey's.

Robina AAPT Mobile Call Centre: Project Thomas Refurbishment
 Robina AAPT Mobile Call Centre: Refurbishment Stage 1
 Elec Cost: \$96,000
 \$123,000

Client: Johnson Controls for IBM

November 2003 to Current.

Project Management reporting to the IBM Property Manager for:

1.	Brisbane: 288 Edward Street:	Fitout of Level 2:	Cost at Site:	\$653,000
2.	Brisbane: 348 Edward Street:	Fitout of Level 13:	Cost at Site:	\$800,000
3.	Brisbane: 288 Edward Street:	Fitout of Level 24:	Cost at Site:	\$686,000
4.	Brisbane: 288 Edward Street:	Fitout of Level 11:	Cost at Site:	\$567,000
5.	Southport Seabank Building:	Refurb. of Levels 7 & 11:	Cost at Site:	\$547,000

Status: 1: Design, 2, 3 & 4: Completed.

Activities included managing the consultants, including the Architect and Electrical, Mechanical and Fire Engineers, and managing the Construction Manager responsible for the building, electrical, mechanical, fire and plumbing packages.

Client: Johnson Controls for Challenger

February 2004 to Current.

Project Management reporting to the Challenger Property Manager for:

Brisbane: 30 Makerston Street: Capital Expenditure Works Cost at Site: \$ 323,000 Brisbane: 30 Makerston Street: Lift Modernisation Cost at Site: \$1,286,590

Status: Works Completed.

Activities include managing the building, electrical, mechanical, fire and lift contractors.

CURRICULUM VITAE: Brett Stuart

Client: Arkeda Consulting Group

November 2001 to January 2004

Served as the Project Electrical Engineer since September 2001, and completed Design and Documentation on the a variety of Commercial and Residential building projects:

Kingscliff: Residential Buildings, 3 off, each 6 Apartments

Terranora: Shopping Village Telephone Cabling

Cranebrook Fire Station, Sydney NSW

West Tweed Heads: Gray Street 102 Unit Development

Pottsville Bowls Club Extension

Biggera Waters 2 Storey Motel at Treasure Island Caravan Park

Lismore "McKenzie on the Park" 6 Storey Hotel / Motel Development

Cooma Centrelink Office, NSW

Arncliffe Fire Station, Sydney NSW

Loganholme Centrelink Storage, Brisbane Old

Park Beach Ariba Hotel Resort, Coffs Harbour, NSW

Katoomba Fire Station, NSW

Coffs Harbour - Good Guys Store, NSW

Strathpine Australian Leisure Holdings Tavern, Brisbane Qld

Nerang Malmar Warehouse, 11,000 m², Gold Coast, Qld

Ballina - Good Guys Store, NSW

Ballina - Grandview 7 Storey / 43 Units Residential Development, NSW

Alice Springs - Centrelink Office, NT Tennant Creek - Centrelink Office, NT

Client: Ross Nielson Properties

November 2001 to March 2002

171 George Street, Brisbane CBD: Obtain Certifications for Building Services to achieve Qld Fire & Rescue Clearances and BCA Certificate of Classification

Role: Project Manager **Status**: Completed.

The client required the above as a condition of sale of this 8 storey Heritage-listed building. Required identifying all shortfalls of the existing installation, and project managing the remedies of these shortfalls with the Electrical, Mechanical, and Fire Services contractors, and finally achieving the necessary certifications, enabling the successful completion of sale of the building by the client.

Client: Resolve FM:

Resolve FM employed Brett on a contract basis for 2.4 years up to 01-07-01, and continues to employ Brett on a part-time basis through Stuart Consulting Pty Ltd, for electrical engineering advice for their Facilities Management portfolio of premium-end AMP properties.

Facilities Management for AAPT at their RP1 Building, Bond University, Gold Coast

Coronation Drive Office Park: Office Building #5 (7 storeys): Project Electrical Engineer advice on Design & Construct project, and Supervision of construction.

61 Mary Street: Replacement EWIS System, Brisbane CBD

Role: Project Electrical Engineer **Status**: Construction commenced.

61 Mary Street is an 18 Storey building in the Brisbane CBD, requiring a replacement Emergency Warning and Intercommunication System. Prepared Design, Specification, review of Tenders.

Project Cost: \$126,000

Santos House Building Management Control System (BMCS), Brisbane CBD

Role: Project Manager, Project Electrical Engineer

Status: Completed.

Santos House is a 14 storey building in the Brisbane CBD, requiring a replacement BMCS system. Surveyed current systems available, prepared Specification, with the assistance from Resolve's Mechanical Engineer in preparing the points list (mostly Mechanical Services). Features include ability to fault diagnose & manage this building from anywhere in the world via an Internet Browser, with internet connection, and appropriate name & password access.

Project Cost: \$84,000

Client: Cellular One:

IS Server Room Relocation:

Role: Project Electrical Engineer

Status: Completed.

Electrical Power, Data Cabling, backup Generator, Air Conditioning, Fire Alarms services (value \$105,000) for Communications Room equipment (value > \$2M) being relocated from off-site into the Cellular One Building.

Resolve FM

(Formerly Resolve Engineering)

01-Feb-1999 to 01-07-2001 (2.4 Years): Electrical Engineer and Project Manager for Resolve

Firm's Address: Level 28, AMP Place, 10 Eagle Street, Brisbane, 4000.

Contact: Iain Smith, Consulting Manager, Qld, Ph 07 3226 1594

Industry and Description of the Business: Design and procurement of Building Services and Facilities

Management for the premium Property Market, including for

primary client and owner: AMP.

Projects

AAPT CDMA National Mobile Phone Switch Headquarters & Call Centre Gold Coast Qld.

Role: Project Manager, Project Electrical Engineer and Facilities Manager

Status: Complete

Project Manager:

Coordinate a team of Mechanical, Electrical and Civil Engineers, Architects, Town Planners, and an on-site Construction Manager, to design and supervise construction of a **\$6.17M** building refurbishment project, reporting directly to the client on the design, construction, costs and program.

The special challenge was managing a Construction Management project with a multitude of contracts, in which the Client, AAPT, doubled the extent of work after tender. The project involved managing:

- 28 Contractors and Suppliers
- 533 Contract Variations from Client doubling the extent of work:

The primary tools for running this project were a system of self-written and developed Excel Spreadsheets, automated by extensive Visual Basic Macros, regularly revised to suit the Client's reporting needs.

CURRICULUM VITAE: Brett Stuart

Electrical Engineer:

Design and supervision of construction of \$2.1M of works including:

- 2 x 750 kVA Generator Sets (units synchronised in parallel) distributing essential power via 6
 Automatic Transfer Switches
- 50 kVA & 60 kVA UPS's
- Power infrastructure upgrade including new 2000A Main Switchboard, and 2000A Generator Main Switchboard
- Data Cabling (category 6B UTP & Fibre Optic Cabling)
- Lightning Protection (Erico System 3000)
- Electronic Security with Proximity Card access for 560 staff
- Office fitout for 4100 sq metres, for some 560 staff

Facilities Manager

Facilities Management of the above complex since 01-06-00, expending to 01-07-01 **\$0.65M** on trade contract works, to keep this facility operating and safe.

AAPT's investment at this site, including the above construction works, plus the CDMA switch equipment rollout for the Mobile Phone Exchange is over \$220M. Facilities Management responsibilities includes maintenance and disaster continuity planning for the electrical power, emergency power and Switch Equipment dedicated Air Conditioning infrastructures.

Qantas Network Redesign:

Various Sites at Brisbane, Gold Coast, Cairns

Role: Electrical Engineer and Project Manager

Work: Establishing Communication Rooms to stringent Telstra standards at Qantas Airports and Travel Centre sites at Brisbane, Gold Coast, Cairns. Works included provision of UPS's, dedicated switchboards and rack earthing systems.

Pacific Fair Shopping Centre Services Audit: Gold Coast, Qld.

Role: Electrical Engineer

Work: Complete Electrical audit of the site to establish a recommended 5 year capital works budget, in view of the proposed 3 stage redevelopment of the site.

Recommendations included upgrading the electrical power infrastructure consisting of 6 Supply Authority transformers and associated 13 Main Switchboards, to accommodate the additional loading from Air Conditioning upgrades and Site Redevelopment.

Initial recommended works including load shedding between Main Switchboards and installation of a Power Factor Capacitor Banks, has been completed to assist the site meet the Summer maximum demand, prior to the new Substation / Main Switchboard provisions of the planned redevelopment.

Property Audits

The Electrical Services of the following properties were audited for Resolve, compiled into Resolve's overall "Due Diligence" Report, and used by Building Owners / Managers, prospective Owners to negotiate a price at the point of sale. The reports detailed the standard of all Electrical Services, and budgeted the costs of upgrading/replacing services to acceptable standards over a scheduled Master Plan of 5 years:

- 144 Edward Street, Brisbane (22 Storey Building)
- 200 Mary Street, Brisbane (19 Storey Building)
- Townsville Australian Tax Office (14 Storey Building)
- 400 Edward Street, Brisbane (2 Stories, NLA: 2887 m2)
- Burleigh Town Markets (NLA: 32,758 m2)
- Byron Bay Woolworths (GLA: 2354 m2)

CURRICULUM VITAE: Brett Stuart

Project Services

Fourteen years of Electrical Engineering experience in the Building Industry, working for Project Services, the Queensland State Government's Building Design and Procurement authority:

- First 4 ½ years as Electrical Engineer in the Head Office at Brisbane,
- Next 3 years as Electrical Engineer in the North Qld. Regional Office at Townsville,
- Last 6 ½ years as **Regional Services Engineer**, leading an Electrical/Mechanical Engineering Design Team, in the North Qld. Regional Office at Townsville.

Firm's Address: 9 Langton Street Garbutt 4814, PO Box 561, Townsville 4810

Contact: Gregg Zonneveld, Regional Services Engineer, Ph 07 4799 5503

Ian Wallace, Regional Manager (Previous), North Old., Ph 07 4799 5503

Industry and Description of the Business: Design and procurement of buildings for Qld. State Government.

Responsibilities as Regional Services Engineer

- 1. Management of a Design Group of Electrical and Mechanical Engineers and Technicians.
- 2. Electrical Engineering: Electrical Design and Contract Administration of the major projects.
- 3. Resourcing workloads with a balance of outside contractors and consultants, and internal staff to meet the projects workload.
- 4. Managing internal and external design staff costs in a commercially viable manner.

Accomplishments:

1. Design and Contract Administration

In summary, for 5 ½ years, led an Electrical/Mechanical Engineering design group including:

Electrical: 1 Electrical Engineer, 1 Electrical Technician,
 Mechanical: 1 Mechanical Engineer 1 Mechanical Technician,

involving the Design and Contract Administration of:

- \$4.1M Electrical Services Construction, average per annum,
- \$2.9M Mechanical Services Construction, average per annum.

(These sums do not include work designed by others, ie Head Office or External Consultants)

Following is a "Major Projects" listing, detailing the level of involvement, and roles undertaken in the above.

2. Software Design

Designed spreadsheets initially on Lotus 123, and later re-written to Excel 97, to do the calculations of all aspects of Electrical Engineering design, except external Floodlighting (used "Perfect Lite"). The following involve significant automation by macros:

- Interior Lighting design
- Electrical Estimating
- Program Management Database

Assisted the office in providing:

- Administration's Document Archive Database
- Building Surveyor's Projects Database
- Mechanical Engineer's Program Management Database

3. Financial and Program Management

Consistently managed the design costs in a commercially viable manner, and completed projects to the target completion dates.

PROJECT SERVICES - MAJOR PROJECTS:

A. BRISBANE OFFICE (1984 to 1989)

ROLE: PROJECT ELECTRICAL ENGINEER

DUTIES: Electrical Design, Specification, Drawings, Estimate, Services during Construction/Contract

Administrator

PERIOD: November 1984 to July 1989

Project:Electrical ValueTotal Project ValueCurrimundi Recreation Hall\$60,000\$1,500,000 approx.Yeppoon Recreation Hall\$65,000\$1,500,000 approx.Seaforth Recreation Hall\$80,000\$1,500,000 approx.

ROLE: PROJECT ELECTRICAL ENGINEER: SUPERVISION

DUTIES: Electrical Contract Administration & Services During Construction

PERIOD: November 1984 to July 1989

Project: Electrical Value Total Project Value

Executive Annexe Construction \$1,200,000 \$10,500,000

Executive Annexe Fit-out \$ 350,000 \$ 1,500,000

B NORTH QUEENSLAND OFFICE, TOWNSVILLE (1989 to 1999)

ROLE: PROJECT ELECTRICAL ENGINEER

DUTIES: Electrical Design, Specification, Drawings, Estimate, Services during Construction/Contract

Administrator

PERIOD: July 1989 to May 1999

Project:	Electrical Value	Total Project Value
Charters Towers Police Station Refurbishment	\$266,800	\$1,480,000
William Ross State High School New School Stage 1.	\$370,000	\$4,498,141
William Ross State High School Stages 2, 3 & 4	\$361,000	\$1,758,750
Magnetic Island Police Station New Station	\$160,000	\$1,369,074
Cairns School of Distance Education New School	\$290,000	\$3,217,600

ROLE: REGIONAL SERVICES ENGINEER & PROJECT ELECTRICAL ENGINEER

DUTIES: Regional Services Engineer: Management of Services Engineering, North Queensland, including

supervision of Mechanical Engineer and Electrical and Mechanical Design Staff. Electrical Engineer:

Electrical Design, Specification, Drawings, Estimate, Services during Construction/Contract

Administrator

PERIOD: May 1992 to end December 1998.

Project:	Electrical Value	Mechanical Value	Total Project Value
Horn Island New State School	\$180,000	\$ 8,000	\$3,214,000
Ravenshoe State School New School by Refurbishment	\$288,000	\$47,000	\$1,708,600
Whitsunday Community Health New Office Building	\$ 54,687	\$70,000	\$ 855,500
Mackay Base Hospital Fire Alarm Systems Upgrade	\$ 72,000	N.A.	\$ 72,000
Mackay Base Hospital Nurse Call System	\$ 87,000	N.A.	\$ 87,000
Herberton State School New School	\$296,207	\$ 3,000	\$3,938,000
Redlynch State School New School	\$232,000	\$ 7,000	\$3,734,000
Wongaling Beach State School New School	\$293,800	\$ 6,000	\$2,817,000
Oonoonba Department of Primary Industries New Regional Office	\$310,000	\$308,000	\$2,059,000
Townsville General Hospital Clinical School	\$ 79,000	\$125,000	

Doomadgee New Police Station	\$508,000	\$260,000	\$3,200,000
Northern Beaches High School New School Stages 1A & 1B	\$668,000	\$751,000	\$6,226,000
The Willows State School New School	\$310,000	\$400,000	\$4,254,000
South Johnstone Department of Primary Industries: Stage 1 Office	\$230,631	\$330,000	\$2,597,000
Charters Towers, Mosman Hall Automatic Fire Alarm System	\$80,000	N.A	\$80,000
Kuranda State High School New School	\$714,000	\$625,000	\$7,000,000
Annandale State School New School	\$450,000	\$477,000	\$5,500,000
Townsville: 12 Schools: Electrical Site Upgrades for future air conditioning	\$1,527,000	N.A.	\$1,527,000
Charters Towers Eventide Nursing Home Aged Care Upgrade	\$127,383	\$220,000	\$1,700,000
Cooktown State School New School	\$577,055	\$450,000	\$4,200,000
Townsville Project Services Office Extensions & Fitout	\$166,235	\$80,000	\$950,000

ROLE: REGIONAL SERVICES ENGINEER: SUPERVISION OF STAFF DESIGNS

Management of Services Engineering, North Queensland, including supervision of Electrical Engineer, Mechanical Engineer and Electrical and Mechanical Design Staff.

The following projects were designed by other Electrical and Mechanical staff. **DUTIES**:

PERIOD: January 1995 to end December 1998

Project:	Electrical Value	Mechanical Value	Total Project Value
Mackay Community Health Centre New Office Building	\$402,500	\$408,000	\$3,299,800
South Johnstone Department of Primary Industries: Stage 2 Laboratory	\$118,000	\$681,000 (External Mechanical Consultants)	\$2,523,000
Townsville General Hospital Air Conditioning Block A	\$112,000	\$340,000	\$ 452,000
Mackay Airport Refurbish Control Tower A.C.	N.A.	\$130,000	\$ 130,000
Cairns Department of Primary Industries Laboratory / Offices	\$360,000	\$1,650,000 (External Mechanical Consultants)	\$2,968,000
Townsville General Hospital N.A. Medical Gas Upgrade		\$ 102,000	\$ 102,000
Rockhampton Government Offices Refurbish Air Conditioning	N.A.	\$395,000	\$395,000
Proserpine Hospital Operating Theatre Air Conditioning	N.A.	\$ 65,000	\$ 65,000
Cairns COTAFE Thermal Relief, Training Kitchens		\$110,000	\$110,000

ROLE: REGIONAL SERVICES ENGINEER; SUPERVISION OF STAFF DESIGNS

DUTIES: Management of Services Engineering, North Queensland, including supervision of Electrical Engineer,

Mechanical Engineer and Electrical and Mechanical Design Staff.

The following projects were designed by other Electrical and Mechanical staff.

PERIOD: January 1995 to end December 1998

Project:Electrical ValueMechanical ValueTotal Project ValueTownsville Family Services
New Diversionary Centre\$115,000\$167,000\$1,200,000Wonga Beach State School
New School\$435,149\$380,000\$3,800,000

ROLE: REGIONAL SERVICES ENGINEER: PROJECT MANAGEMENT

DUTIES: Project Management

PERIOD: January 1995 to end December 1998.

Project: Total Project Value

Proserpine Hospital Minor Upgrade \$190,000

Karumba Child Care Centre \$435,000

Normanton Child Care Centre \$443,000

Moranbah, Dysart & Sarina Hospitals

Mechanical & Electrical Upgrade \$292,000

ROLE: REGIONAL SERVICES ENGINEER: PROJECT BRIEF

DUTIES: Engagement by Client for Preparation of Project Electrical Brief

PERIOD: January 1997

Project: Electrical Value Total Project Value

Townsville Museum of Tropical Qld.

Stage 2 Extension to house \$1,540,000 \$12,675,000

Pandora Shipwreck