



**CRAIG BELL**  
SENIOR STRUCTURAL ENGINEER  
CURRICULUM VITAE

# CRAIG BELL CV



## PROFILE

With over 15 years' experience within the industry, Craig has enjoyed working as a Buildings Structural and Civil Engineer within large multi-disciplinary consultancies in New Zealand and the United Kingdom.

Craig has been involved in a variety of large building and infrastructure projects, including high rise residential and commercial building design, bridge design, sports development, design review and construction observation. Following the Canterbury Earthquakes, he was actively involved in the Initial Seismic Assessment of a number of buildings damaged within the event, and remained actively involved with rebuild work, undertaking seismic evaluation and retrofit schemes for various buildings.

Aside from his strong technical skills, Craig's strengths include being organised and efficient, strong leadership and

communication skills, and working well within a collaborative environment.

## QUALIFICATIONS

BEng Civil (Hons) – Bachelor of Civil Engineering, University of Auckland

Diploma in Engineering (Civil), UNITEC Institute of Technology

Chartered Professional Engineer (CPEng) 2012

Chartered Member of Engineering New Zealand (CMEngNZ)

## CAREER HISTORY

2018 – Present, Senior Structural Engineer – Structus Consulting Limited

2015 – 2018 Senior Structural Engineer, BGT Structures, Auckland

2013 – 2015 Senior Structural Engineer, Cundall Limited, London, UK

2012 - 2013 Structural Engineer, Meinhardt Limited, London, UK

2008 – 2012 Civil/ Structural Engineer, Opus International Consultants

2003 – 2006 Civil Engineer, Opus International Consultants

## MANAGEMENT SKILLS

- Well-developed and efficient organisational, communication and written skills

- Demonstrated record in successful delivery and timely outcomes of structural and multi-discipline design projects
- Ability to relate well to clients, stakeholders and project teams, providing clear direction and advice
- Confident and able to work individually or within a collaborative environment

### TECHNICAL SKILLS

- Investigation, assessment, design and construction supervision of buildings and associated civil works
- Analysing and developing solutions to complex structural engineering problems, including seismic analysis and design of new and existing building and civil structures
- Forensic Engineering, including identification and assessment of building defects, and detailed design of remedial works solutions
- Surveillance and quality assurance of the construction phase

### PROJECT EXPERIENCE

#### RESIDENTIAL PROJECTS

##### **Eden View Apartments, Auckland, 2017-Present, \$40m**

Structural Engineer for Eden View Apartments, 428-448 Dominion Road, Auckland. The project included detailed structural design and CM3 level observation of a new 6 storey apartment building with carparking and retail at ground level on street frontage. The structure is typically steel framed with precast concrete double tee floors. The lateral system consists of steel concentrically braced frames in the transverse direction and steel moment resisting frames in the longitudinal direction.

##### **Line Epping & Derna Tobruk, Auckland, 2020-present**

Large two storey terraced housing residential developments for Fletcher Living in Glenn Innes and East Tamaki. Predominantly plywood portal frame and GIB braced timber frame structures, with rib raft floor slabs and some steelwork, plus pipe bridging structures and site retaining walls. Structural engineering design and construction monitoring.

##### **St James Suites, 304 Queen Street, Auckland, 2015-2017, \$120m**

Structural Engineer for the St James Suites Development, 304 Queen Street Auckland. The project included detailed design of a 40-storey reinforced concrete building, including connection into the existing historic St James Theatre; and advising and monitoring of deconstruction of the existing buildings within the site, including temporary works support of the existing Queen Street façade.

St James Suites comprised of 26,500m<sup>2</sup> of Residential and Commercial floor area, including 3,800m<sup>2</sup> of prime Queen Street retail space at basement and ground floor level; car parking within the podium levels 3-8 with allowance for 200 carparking spaces; a lap pool, sauna, spa and gymnasium at level 8, and communal roof terrace at level 9; and a 140-metre-high residential apartment tower from levels 8 – roof level, accommodating 323 apartments.

Construction works of the peer reviewed and consented design were due to commence in 2017. However, these were halted due to client funding issues.

**Union Green Apartments, 39-47 Union Street, Auckland, \$60m**

Structural Engineer for Union Green Development, 39-47 Union Street, Auckland. The project included detailed structural design and CM3 level observation of one 12-Storey Residential Apartment Building, and three 4-storey townhouses supported on a podium slab with basement carparking below.

**Parkside Residences, 12-26D Barrack Road, Mount Wellington, Auckland, \$50m**

Structural Engineer for Parkside Residences, 12-26D Barrack Road, Mount Wellington. The project included scheme, and detailed design of three 5-storey Residential Apartment buildings, with 2 levels of basement level carparking below. Buildings B and C were designed to be supported on a common podium slab at level 1, with the buildings seismically separated above. Building A was designed to be independent of the remaining two buildings.

**165-167 Jervois Road, Herne Bay, Auckland, \$30m**

Structural Engineer for 165-167 Jervois Road, Herne Bay. The project included scheme design and liaison with the lead Architect and Client for a 5-storey high specification residential apartment building.

**Greenwich Square, London, UK, £30m**

Structural Engineer for the detailed design of 3 no. seven storey reinforced concrete mixed use (residential, retail and office) buildings, and a four storey Masonite building and podium slab associated with the Greenwich Square Development.

**COMMERCIAL PROJECTS**

**34 Sale Street, Auckland Central, Auckland, \$30m**

Structural Engineer for 34 Sale Street, Auckland Central. The project included seismic strengthening of an existing 4-storey carparking building, and structural design for an additional level above the existing roof carpark, for commercial use.

**NZI Roof, 1 Fanshawe Street, Auckland, \$2.5m**

Structural Engineer for building retro-fit of a new steel roof and supporting structural steelwork, to enclose mechanical plant at NZI Roof, 1 Fanshawe Street, Auckland.

**V'NUE Fire Egress Stairs, 20 Viaduct Harbour Avenue, Auckland**

Structural Engineer for building retro-fit of an external 5-storey structural steel fire egress stair. The project included structural design and CM3 level observation of the structural steel stairs, which utilized an existing external steel gantry for support.

**No.1 Hobson Street (Auckland CBD), Auckland**

Structural inspection and building condition assessment of 1 Hobson Street Hotel and Apartments, associated with water penetration into the basement levels of a multi-storey reinforced concrete building.

**Girlguiding UK, London, UK, £10m**

Structural Engineer for the redevelopment of 17-19 Buckingham Palace Road, a 6-storey building with an occupied basement.

The project involved dividing the building into two properties, one comprising of 17-19 Buckingham Palace Road to be Girlguiding UK offices, the remainder being 8-10 Palace Street, redeveloped as a hotel.

#### **H+M, The Parade, Swindon, UK, £10m**

Structural Engineer for the development of H+M, The Parade, Swindon. The project involved the redevelopment of two adjoining buildings into a single retail unit for H+M.

#### **R+ Offices, Reading, UK, £20m**

Structural Engineer for Stage 'D' design (Scheme Design and Planning) of R+ Offices, Reading. The scheme included the demolition of an existing four-storey 1970's reinforced concrete building, and redevelopment of the site into a seven-storey structural steel building designed to provide high spec open plan office space.

#### **Weavers Wharf Development, Kidderminster, UK, £30m**

Structural Engineer for Stage 'D' design (Scheme Design and Planning) of Weavers Wharf Development, Kidderminster. The development includes demolition of an existing 6-storey building, opening of a bridge and culverted section of the River Stour, and construction of 6 new buildings providing over 4,700m<sup>2</sup> of retail and restaurant space. The stage D design additionally included the provision for a single span tie arch vehicle and pedestrian bridge crossing an existing canal.

### **HEALTHCARE AND AGED CARE PROJECTS**

#### **Aria Bay, Auckland, 2016-present, \$60m**

Structural Engineer for Aria Bay Redevelopment, a new retirement village development in Browns Bay, Auckland. 2 no.

5 storey apartments blocks and 4 storey day clinic block (Importance Level 3) form the development within an existing operational retirement village campus, plus a two storey link and bridge structure in a very constricted part of the site. Significant RC soldier pile tiered retaining structures with ground anchors, RC bored pile foundations, precast concrete shear walls and steel frames. Responsible for structural engineering design and construction monitoring from concept through construction.

#### **Whangarei Hospital Theatres Extension, Auckland, 2019-present, \$10m**

Extension to the existing Theatres building at Whangarei Hospital, consisting of a two level building with the extension to provide additional Operating Theatre facilities. This is an Importance Level 3 structure. Responsible for structural engineering on this project, from the value engineered concept through construction.

#### **Waitakere Hospital SCBU, Auckland, 2017-present, \$10m**

Refurbishment and extension to the existing Special Care and Birthing Unit at Waitakere Hospital, consisting of single level building with both existing building refurbishment and extension to provide additional facilities. This is an Importance Level 4 structure. Structus services comprise structural engineering on this project, from the initial concept through construction.

### **PEER REVIEWS**

#### **Copper Crest Retirement Village, Tauranga**

Structural design peer review of a three-storey aged care facility, and three-storey independent living/apartment building associated with the Copper Crest Aged Care Facility, Tauranga. The peer review

considered site retention, building foundation, and superstructure design. The Apartment structure utilised concrete shear walls in both orthogonal directions, whereas the Care Units lateral load resistance was provided by concentrically braced frames north/south and moment resisting frames east/west. The buildings are seismically separated with a single storey link structure providing an internal connection.

#### **ASB North Wharf, Auckland**

Structural design peer review of two seven-storey reinforced concrete buildings, including consideration of foundations, structural horizontal and vertical elements, high level steel frames, stairs, and bridges.

#### **EMU Maintenance Depot, Auckland**

Structural design peer review of a two storey structural steel and reinforced concrete masonry maintenance depot building designed to accommodate Auckland's new electric multiple unit (EMU) train fleet.

### **RAIL INFRASTRUCTURE**

#### **DART 1 (Developing Auckland's Rail Transport) – Newmarket Rail Station, Auckland**

Civil / Structural Engineer for DART 1 which involved large modifications and upgrades to Auckland's rail network and infrastructure in and around Newmarket junction.

Responsible for a broad range of civil and structural engineering works which included earthworks design for rail double tracking, a bridge replacement, station platform design, drainage and sewerage relocation and stormwater management design.

***Newmarket Station received an NZIA Architecture Award***

#### **DART 9 – Manukau Rail Link Interchange, Auckland**

Structural Engineer responsible for the design and construction supervision of a below ground rail station. The station was designed as a secant piled open top box, propped apart by reinforced concrete capping beams to a depth of 7.0 metres over a 320 metre length.

***The project won the Concrete Construction Award from NZCS***

#### **Papakura Rail Station Feasibility Study and Detailed Design, Auckland**

Project Manager and Structural Engineer involving the preparation of a concept feasibility report to evaluate the various options available for improving efficiency of passenger and freight operations ahead of electrification of the Auckland rail network.

#### **Kingsland Station Upgrade, Auckland**

Responsible for the structural design, project management, and construction supervision of new rail station platform canopies ahead of Rugby World Cup 2011.

### **MARINE ENGINEERING**

#### **Birkenhead Ferry Terminal Upgrade – Outer Berth, Auckland**

Structural Engineer responsible for the design and management of Birkenhead Ferry Terminal Outer Berth, including the design and construction supervision of fender piling, a gangway ramp, a hydraulic platform and landing support structures, and associated architectural works.

### **Beach Haven Ferry Terminal, Auckland**

Responsible for the design of Beach Haven Ferry Terminal including the design of a gangway ramp and canopy, and fender piles, and the preparation of a performance specification and design review of a floating pontoon.



