Rider Levett Bucknall possesses significant local and international experience in the provision of cost and delivery advice for high profile projects in the health sector, evidenced by more than 40 projects showcased in this brochure.

Our involvement in numerous major hospital projects throughout Australia and New Zealand means we have an inherent understanding of the intricacies involved in the delivery and operation of complex health projects. These facilities support the delivery of health services to the community and often involve redevelopment projects undertaken in an operational environment with significant staging and decanting components.

INDUSTRY STATUS, FUTURE TRENDS

The focus of contemporary health facility delivery is to facilitate a model of care that delivers quality health services to the community while keeping pace with changing demands, efficiently using finite resources and improving community and staff satisfaction.

The challenge facing health care providers, in the face of increased costs and an increased number of specialised units involving sophisticated techniques and equipment, requires the design of health facilities to be driven by infrastructure, flexibility and whole-of-life costs. The annual recurrent costs of hospitals can exceed one third of the capital cost and therefore it is essential that the design and planning of facilities achieve efficient operational solutions.

Health facility design solutions need to be innovative and provide future flexibility capable of adapting to new technology and changing trends in clinical practice and models of care. Ensuring sustainable design is critical to the future of health facilities where significant savings in energy and water consumption can be achieved. Improving the environment of the facility through the use of natural light, breakout spaces and considered design delivers increased staff and community satisfaction.

WHOLE-OF-LIFE PLANNING

Rider Levett Bucknall specialises in every cost facet of the lifecycle of health facilities from planning, forecasting, modelling and feasibility studies to asset management.

Our whole-of-life approach considers all aspects of the use, operation, maintenance and the RE‘lifing of health facilities to achieve efficient, cost-effective and sustainable results.
COST MANAGEMENT

Cost management is a vital part of the pre-construction process. We draw on years of market experience and knowledge of the latest techniques and projects to prepare cost plans that identify opportunities for cost efficiencies while managing quality.

As most costs are determined during the planning stage, our expertise adds considerable value to the project through this critical phase.

An essential part of the process is having an in-depth understanding of all aspects of the facility. As Rider Levett Bucknall has a long, successful track record, we are able to review our database of current and historical costs to provide fast, accurate budgets in a wide variety of health facilities.

BIM CAPABILITY

Rider Levett Bucknall has invested over a decade of research and development in BIM and is leading the implementation of BIM supported cost planning, providing cost planning advice and control via the latest BIM ready technology. Importantly, we have a robust understanding of the object and element protocols design teams must follow to enable the benefits of 4D and 5D BIM to be realised. Our in-house model linked software ‘Qubit’ enables our participation in cost planning at the various Levels of Development (LOD) of a model providing real time cost planning and budget control as the design solution is co-ordinated to enable the most economic cost for the preferred design and functional solution.
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CENTENARY HOSPITAL FOR WOMEN AND CHILDREN, CANBERRA

ACT HEALTH DIRECTORATE

A new state of the art 148-bed hospital incorporating new and fully refurbished buildings providing specialised paediatric, maternity, neonatal, gynaecological services, a birth centre plus out-patient services at the Canberra Hospital campus.

Services: Cost management
Architect: BVN Architecture

BEGA HOSPITAL, BEGA VALLEY

HEALTH INFRASTRUCTURE

The South East Regional Hospital is the biggest infrastructure project in the history of the Bega Valley. When open in 2016, the hospital will provide an integrated precinct with a range of enhanced medical and health care services for residents and surrounding districts in the Bega Valley.

With a total project budget of $187 million, the 28,000 square metre facility will offer a variety of services not previously provided in this region. The building has been designed to meet the current and future health needs of the community. It’s not just a hospital but a health campus incorporating primary health care, ambulatory services along with community mental health and drug and alcohol services.

Services:
- Business case estimating
- Procurement strategy advice
- Conceptual and detailed cost planning
- Cost and budget control, including value engineering
- Schedules of quantities
- Contract cost management and administration
- Final account reporting
- Tax depreciation capitalisation schedule
- Cashflow forecasting

Architect: BVN Donovan Hill
BLACKTOWN MT DRUITT HOSPITAL REDEVELOPMENT, SYDNEY

HEALTH INFRASTRUCTURE

The Blacktown Mt Druitt Hospital Development (BMDH) Stage 1 project comprises the provision of new buildings and refurbishment of existing facilities on both the Blacktown Hospital and Mt Druitt Hospital campuses. The total project budget is $320 million inclusive of consultant fees, contingency escalation, furniture fittings and equipment and is an end cost budget.

The works at the Blacktown Hospital site include a five storey clinical services building of approximately 32,000 square metres, cancer centre, 20-bed sub-acute mental health facility and extensive refurbishment of the existing emergency, intensive care and diagnostic imaging departments.

The works at the Mt Druitt Hospital site include the expansion and refurbishment of the main clinical building; expansion of the oral health department; a new build 10-bed rehabilitation unit and reconfiguration of main entry access. The facilities have been designed with consideration of the architectural features of the existing building.

Rider Levett Bucknall was appointed in January 2011 to provide cost management services for the project from concept design phase through to completion of construction, which is currently forecast as June 2016.

Services: Cost management

Architect: SKM S2F
The Chris O'Brien Lifehouse at RPA is a world-class cancer treatment and research facility providing integrated care to patients and carers. The project is located in the Royal Prince Alfred Hospital - Sydney University Precinct in Camperdown Sydney. Lifehouse integrates clinical care, research and education creating opportunities for innovative discoveries, compassionate holistic care and better outcomes for patients.

With a total project budget of $230 million, the 45,000-square metre facility houses ambulatory clinics, chemotherapy, radiation therapy, operating theatres, intensive care unit, day surgery, integrative medicine, dry research, imaging facilities, pathology collection and offices.

Rider Levett Bucknall was appointed to provide cost management services for Stage 1 from concept design phase through to completion of construction. Working with Capital Insight and Rice Daubney, the firm successfully kept the project within budget through the concept design, scheme design and design development phases.

Services: Cost management
Architect: Rice Daubney
**ROYAL NORTH SHORE HOSPITAL CLINICAL SERVICES, SYDNEY**

**HEALTH INFRASTRUCTURE**

The RNSH is one of the State’s major trauma centres. The new building will provide a variety of services including a private mental health unit on level two, a women’s health and maternity unit across levels three and four, a general inpatient unit on level five, and a severe burns unit on level six. A pediatric inpatient unit will make up level seven.

The new centre will create a patient focused health system that will encourage innovative models of care and deliver extreme efficiency. The facility, designed by Building Studio Architects and Woods Bagot, will incorporate new technologies and be a flexible form to ensure emerging trends in clinical practice and care models can be easily incorporated into the building.

Services: Cost management

Architect: Woods Bagot

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**ILLAWARRA CANCER CARE CENTRE, WOLLONGONG**

The $14 million project responds to the growing demand for cancer services to provide a quality, networked service and capacity to meet the needs of the region for the future. The Illawarra Regional Cancer Centre project has significantly improve capacity of the existing centre to provide quality cancer services for patients in the Illawarra region. This project has extensively expanded the existing centre on the Wollongong Hospital site through a combination of new build and refurbishment works. The project was funded by contributions from the Federal Government’s Health and Hospital Fund and the NSW State Government.

Services: Cost management

Architect: Hassell
SHOALHAVEN CANCER CARE CENTRE, ILLAWARRA

HEALTH INFRASTRUCTURE

The Shoalhaven Cancer Care Centre [SCCC] will improve access to essential cancer services for the growing South Coast population through every stage of the patient journey. In association with the Illawarra Cancer Care Centre [ICCC] upgrade the SCCC will enhance hematology, medical oncology and radiotherapy services improving access and wait time for both chemotherapy and radiotherapy to the catchment population of South Coast New South Wales.

The $33 million project provides a new contemporary cancer care centre, including the following:

- Integrated multidisciplinary cancer care with bunkers, linear accelerator and associated equipment to deliver radiotherapy;
- Ambulatory care services providing multidisciplinary clinics, allowing patients to have their treatment program planned in one visit with increased access to medical oncology; radiation therapy, allied health and support services;
- Teaching and research facilities;
- Clinical offices; and
- Scope for further service expansion.

Services: Cost management

Architect: Hassell

WOLLONGONG HOSPITAL, WOLLONGONG

HEALTH INFRASTRUCTURE

The redevelopment of Wollongong Hospital is anchored around a purpose built elective surgical services centre, primarily housed in a new six level building adjacent Loftus Street. The project comprises seven new operating theatres, 60 new surgical beds and a new 24-bed intensive care unit. The expansion also includes; 12 extended day-only beds; ten new close observation beds; six additional intensive care unit / high dependency unit beds; a new central sterilising department; and new linen stores, loading dock area and food services works. This project enhances the co-ordination and provision of multi-disciplinary health services and significantly boosts the region’s critical care capacity. Construction completion is programmed in 2015.

Services: Cost management

Architect: Hassell and MBMO
GOLD COAST PUBLIC UNIVERSITY HOSPITAL, SOUTHPORT
GOLD COAST HOSPITAL AND HEALTH SERVICE, DEPARTMENT OF HEALTH

Gold Coast is home to Australia’s largest public health infrastructure project to date, valued at $1.76 billion. Gold Coast University Hospital (GCUH) has been built with capacity for 750 overnight beds, more than 70 per cent single rooms and capability to become one of the largest clinical teaching and research facilities in the country.

Built by managing contractor Lend Lease and assisted by two joint ventures*, GCUH is six separate buildings and a total floor space of approximately 170,000 square metres. Located adjacent to Griffith University in the integrated Health and Knowledge Precinct at Southport, the project required construction of roads, extensive landscaping and a centralised energy plant for cooling, emergency power and water distribution systems.

GCUH has created an innovative, sustainable environment for health care provision into the future. Purpose-built, it offers a range of more complex services than ever before available to the region.

*Engineering Joint Venture: Aurecon/ SKM and Architectural Joint Venture: HASSELL/ Silver Thomas Hanley Architects/PDT.

Services: Bills of quantities and cost to complete review
Architect: GCUH Architecture (a joint venture of PDT / STH / Hassell Architects)

LADY CILENTO CHILDREN’S HOSPITAL, BRISBANE
LEND LEASE

This project will be the hub for children’s health services in Queensland in a new hospital combining the staff and services from the Royal Children’s and Mater Children’s hospitals. The hospital has 16 levels (four basement levels, 11 clinical floors and a plant/helipad level). 81,000 square metres of clinical space includes 3,500 square metres in the emergency department. The project is scheduled for completion in 2014 and has included significant provisions for environmental sustainability.

Services: Managing contractor’s cost consultant
Architect: Conrad Gargett Riddel Architecture/Lyons JV
ROBINA HOSPITAL EXPANSION, GOLD COAST

GOLD COAST HOSPITAL AND HEALTH SERVICE, DEPARTMENT OF HEALTH

This project was named Healthcare Project of the Year in the 2012 World Architecture News Interior Design Awards. The expansion of existing hospital facilities commenced in 2008 and was completed in 2012 to provide:

- A new clinical building to house new wards and support facilities
- New theatre / perioperative suite
- Refurbishment of existing facilities, including medical imaging, CSSD, inpatient services, kitchens, etc.
- Replacement of existing central plant, equipment and goods handling, plus an increased dock and ancillary services area.

The expansion resulted in a total of 364-beds. Bond University teaching facilities are included.

Services: Cost management
Architect: Bligh Voller Nield

SUNSHINE COAST PUBLIC UNIVERSITY HOSPITAL, KAWANA

QUEENSLAND HEALTH

This new public tertiary level teaching hospital is being constructed on a 20-hectare site at Kawana and when completed in 2016 will provide approximately 450-beds, increasing to 738-beds by 2021 if required. It is part of the Kawana Health Campus incorporating a skills, academic and research centre and a co-located private hospital.

The project is to be delivered as a Public Private Partnership (PPP) and is Queensland’s first public hospital PPP building project.

Services: State cost advisor providing cost advice, recurrent cost advice, inputs into financial model, risk management advice, bid assessment and assessment and negotiation of modifications.

Architect: Architectus and Rice Daubney JV
To WNSVille Hospital

TOWNSVILLE HOSPITAL REDEVELOPMENT, TOWNSVILLE
QUEENSLAND HEALTH

The project comprises a major expansion of the existing hospital including a new emergency department and 32-bed intensive care unit, refurbishment of the existing intensive care unit into neonatal intensive care, new cancer care centre, expansion of pathology, and a new kitchen, mortuary and central energy building. The expansion also features three additional inpatient units, two additional theatres and a planned procedure centre. Maintaining existing hospital operations without disruption created significant staging and decanting challenges.

Services: Cost management
Architect: Cox Rayner – Thomson Adsett HPI [TAHPI]

To WNSVille Queen and All

The $35 million Flinders Centre for Innovation in Cancer provides multidisciplinary cancer care at all stages of cancer healthcare, from education, diagnosis, treatment and the end-stages of the disease. The groundbreaking cancer centre was among the projects shortlisted for the 2012 World Architecture Awards.

In addition to providing a place of healing, the centre also focuses on the scientific pursuit of preventative and screening detection strategies. The innovative building design provides research integration across a number of clinical sciences and disciplines in the treatment of cancer.

The centre houses research laboratories and office accommodation for clinical trials, a cancer clinic, day treatment suites, a multipurpose lecture and function space, patient education facilities, and a rooftop helipad providing direct access to the centre’s accident and emergency department.

Services: Feasibility and schematic cost management including extensive value management, cost options, post contract consultancy
Architect: Woodhead
FLINDERS MEDICAL CENTRE REDEVELOPMENT, ADELAIDE
SA HEALTH
The $175 million redevelopment of Flinders Medical Centre featured a major site services infrastructure upgrade and a new south wing accommodating WABS labour, birthing and delivery suites.
The operating theatres and emergency department were redeveloped into new modern facilities which involved multi-staged construction to ensure that the hospital remained fully operational during the redevelopment.
Services: Master planning, cost management, value management and contract administration
Architect: Woodhead

GILBERT BUILDING REDEVELOPMENT WOMEN’S AND CHILDREN’S HOSPITAL, ADELAIDE
SA HEALTH
The $70 million Gilbert Building Redevelopment Project adds three new levels to the existing Gilbert Building to provide improved care for patients.
The challenging project included the upgrade and extension of the Hospital’s Good Friday Building lifts providing access to three new floors.
The Gilbert Building provides a specialised single-point centre treating children and teenagers with cancer, blood disorders, cystic fibrosis and lung illnesses delivering modern functional assessment and patient areas, gene therapy laboratories and a dedicated children’s cancer centre.
Services: Cost management, value management and contract administration
Architect: Cheesman Architects
GLENSIDE MENTAL HEALTH AND SUBSTANCE ABUSE HEALTH FACILITY, ADELAIDE

SA HEALTH

The $150 million Glenside Campus redevelopment has transformed an asylum style hospital from the Victorian-era to a modern health care campus facility with an environment merging health services with every day community life.

The facilities now include open community space, housing, shopping, business and cultural activity.

The facility supports people with mental illness or substance abuse issues providing healthcare in an environment allowing an ‘everyday lifestyle’ and reducing the stigma associated with mental healthcare.

Services: Cost management, value management and contract administration

Architect: Swanbury Penglase Architects / Medical Architecture

LYELL MCEWEN HOSPITAL

SA HEALTH

A $350 million staged redevelopment of the existing hospital including women’s health and birthing facility, 50-bed mental health unit, paediatric ward, new 96-bed ward wing with helipad and extensive infrastructure and post disaster improvements.

Services: Cost management and post contract services

Architect: Cheesman Architects / Silver Thomas Hanley
Redevelopment and expansion of the regional hospital at Mount Gambier provides increased acute care capacity including expanded mental health, palliative care, and rehabilitation and general medical services.

Refurbishment of the emergency department provides 12 additional spaces and improved patient flow. Reconfiguration and refurbishment of the day centre to office accommodation and refurbishment of hospital wards provides more consulting rooms and an expansion of dental services, and infrastructure upgrades to the central sterilisation services department.

A new adjoining building includes an additional eight consulting suites, doctors’ offices, medical records, ten single bed wards, and a plan platforms room. An undercover link and interface works join the new building seamlessly to the existing hospital building. All new build areas are constructed to achieve a five star IGRAT rating.

Scheduled for completion on December 2014, the project is a multi-staged project to ensure minimal disruption to the 24-hour operations of the major hospital.

Services: Cost management, value management, contract administration and asset evaluation

Architect: Woodhead
SOUTH AUSTRALIAN HEALTH AND MEDICAL RESEARCH INSTITUTE (SAHMRI), ADELAIDE

SAHMRI
Construction of a LEED Gold rated health and medical research building on the Health and Biomedical Precinct site comprising dedicated wet and dry laboratory space, write up / workspace, public space and administration space for the Institute.

Ecologically sustainable design initiatives include high performance intelligent facade / skin, displacement ventilation, chilled water storage, grey water recycling all managed via an integrated building system. The project also includes significant research infrastructure including a climate / acoustically controlled animal house and the state’s first radioactive isotope producing cyclotron.

Program and cashflow was based on funding milestones negotiated with DEEWR.

Client benefits include a state of the art landmark research facility, attraction of top international academics and researchers, revitalisation of a brownfield site and consolidation of research expertise.

Services: Cost management, value management, contract administration and claim advice

Architect: Woods Bagot
THE NEW ROYAL ADELAIDE HOSPITAL, ADELAIDE
SA HEALTH, SA HEALTH PARTNERSHIP
The new $1.8 billion Royal Adelaide Hospital (new RAH) will be South Australia’s largest and Australia’s most advanced hospital. The new RAH is the single largest infrastructure project ever undertaken in South Australia. Containing 700 single room beds and 100 same-day beds, the new RAH will have the capacity to admit more than 80,000 patients per year.
The SAHP consortium (including Hansen Yuncken, Leighton Contractors, Macquarie Capital and Spotless) will undertake the financing, design, construction and operation of the non-clinical services of the new RAH over a 35-year concession period. From 2008 to early 2011, Rider Levett Bucknall provided State Government cost advisory services. From mid 2011 to 2016, the firm is providing financier certification to the construction contract in the common terms deed.
Client benefits are many: a generational step change in South Australian healthcare, rejuvenation of a city brownfield railyard site, increased patient amenity (patient-centred care) and attraction and retention of quality resources.
Services: Cost management, value management, contract administration, PSC analysis, bid analysis and financial certification
Architect: Silver Thomas Hanley – Design Inc Joint Venture

THE QUEEN ELIZABETH HOSPITAL STAGE 2, ADELAIDE
SA HEALTH
A three-storey building with an undercroft carpark with the top two levels split into a laboratory wing and office wing separated by an atrium. The $180 million facility was constructed within a functioning hospital with the aim of relocating the current research unit into a consolidated building. Client benefits include bringing the laboratories into line with current code requirements and increased patient amenity.
Services: Master planning, cost management, value management, bills of quantities and contract administration
Architect: Cheesman Architects
BENDIGO HOSPITAL, VICTORIA

EXEMPLAR HEALTH

The Bendigo Hospital Project is the largest regional hospital development in Victoria. It will deliver a world-class regional hospital, which will incorporate the latest design and technology solutions, in a tranquil and caring environment.

The new facilities include 372 inpatient beds, 72 same day beds, 10 new operating theatres, a regional cancer centre, an 80 bed integrated mental health facility, a mother and baby unit, a helipad and parking for 1,350 cars.

Construction of the new hospital began in 2013 and is due for completion by the end of 2016.

Services: Financial certifier and sub-independent reviewer

Architect: Bates Smart

ROYAL WOMEN’S HOSPITAL, MELBOURNE

VICTORIAN GOVERNMENT AND THE ROYAL WOMEN’S HEALTH PARTNERSHIP

The 243-bed Royal Women’s Hospital provides specialist women’s and neonatal paediatric health services. Specific services provided include breast screening, gynaecology, oncology and emergency services.

Innovative ESD features include 100 per cent fresh air conditioning to inpatient wards, promoting health and minimising cross infection for patients and staff. North/south orientation maximises natural interior lighting. The floor plan is also future-proof, offering flexible spaces for changing requirements.

Services: Cost management during bid phase, financiers technical due diligence, independent certification for the Royal Women’s Health Partnership and independent review for the Victorian Government.

Architect: Design Inc – Woodhead International Joint Venture
JOONDALUP HEALTH CAMPUS, PERTH
NORTH METROPOLITAN HEALTH SERVICE

Joondalup Health Campus is the largest health facility in Perth’s Northern Suburbs with over 500 beds for public and private patients. The redevelopment, funded by the West Australia State Government, Ramsay Health Care and the Federal Government was completed ahead of schedule and under budget.

Undertaken over seven stages, the development featured construction of a new central plant building, three-storey public ward block, new emergency department, extension to operating theatres, ICU/CCU/CSSD, kitchen, a St John Ambulance centre and a child care centre. Rider Levett Bucknall was appointed as the State Government’s cost consultant, providing advice during the finalisation of the main contractor’s engagement and throughout all stages of construction, with particular emphasis on budget and cost analysis, monitoring of progress payments and assessment of scope changes.

Services: Cost management
Architect: Silver Thomas Hanley

PERTH CHILDREN’S HOSPITAL, PERTH
JOHN HOLLAND

The Perth Children’s Hospital is a new facility being built at the QEII Medical Centre. Featuring the latest in hospital design the 126,000 square metre facility incorporates 274-beds, 11 operating theatres, an emergency department, intensive care unit and neonatal intensive care, a dedicated mental health unit, extensive staff area and dedicated end of trip facilities. The project also incorporates basement car parking facilities and a rooftop helipad.

Rider Levett Bucknall were part of the John Holland team during the tender phase of the project and also were engaged as John Holland’s cost planner during the first stage of the project.

Services: Cost management
Architect: JCY / COX / Billard Leece
The new Clinical Services Building at Middlemore Hospital was constructed over two stages to ensure the hospital remained fully operational. Featuring the latest in hospital design, the building will service the needs of patients and staff in one of New Zealand’s busiest and biggest hospitals.

The 35,000 square metre build incorporates back of house facilities and administration with a state-of-the-art critical care unit, theatres and recovery areas and includes a spiritual centre and medical assessment unit on the ground floor.

A comprehensive services investigation programme reviewed energy saving initiatives, incorporating them where appropriate to reduce energy usage.

Services: Cost management
Architect: Klein Architects

ST JOHN OF GOD MURDOCH HOSPITAL, PERTH

ST JOHN OF GOD MURDOCH HOSPITAL

St John of God Murdoch Hospital redevelopment is Western Australia’s largest private health sector investment with a total project budget of approximately $195 million. This will see the facility grow from 363-beds to 537-beds, with additional car-parking, operating theatres, extended intensive and critical care units, endoscopy unit, new six-storey medical suites building (Wexford) and five-storey cancer care centre. Completion is scheduled for December 2014.

Rider Levett Bucknall was appointed to provide cost management services throughout the project from concept design through to completion of works.

Services: Cost management
Architect: Silver Thomas Hanley

CLINICAL SERVICES BUILDING, MIDDLEMORE HOSPITAL, AUCKLAND

COUNTIES MANUKAU DISTRICT HEALTH BOARD

The new Clinical Services Building at Middlemore Hospital was constructed over two stages to ensure the hospital remained fully operational. Featuring the latest in hospital design, the building will service the needs of patients and staff in one of New Zealand’s busiest and biggest hospitals.

The 35,000 square metre build incorporates back of house facilities and administration with a state-of-the-art critical care unit, theatres and recovery areas and includes a spiritual centre and medical assessment unit on the ground floor.

A comprehensive services investigation programme reviewed energy saving initiatives, incorporating them where appropriate to reduce energy usage.

Services: Cost management
Architect: Klein Architects
ELECTIVE SURGERY CENTRE,
NORTH SHORE HOSPITAL, AUCKLAND

WAITEMATA DISTRICT HEALTH BOARD

A two-level purpose built facility, the ground level houses four operating theatres, CSSD, recovery and consulting rooms. The first level incorporates 40-beds in various combinations. All bedrooms are located on the perimeter of the building with a central core housing communal service area. Plant rooms are situated at each end of level two. The development also integrates a café and management suite at ground level.

Services:
- Business case estimating
- Conceptual and detailed estimating and cost planning
- Procurement strategy advice
- Budget control and management
- Contract cost management and administration
- Final account negotiations and agreement
- Cashflow forecasting

Architect: Jasmax
SILVERDALE MEDICAL CENTRE, AUCKLAND

SILVERDALE MEDICAL CENTRE PARTNERSHIP

The new 3,500 square metre three storey medical centre was a joint venture project between Southern Cross Hospitals and Silverdale Medical Centre to provide a modern purpose built medical facility on the outskirts of Auckland.

The ground floor of the facility contains general practice, specialist consulting suites, pharmacy, physiotherapy, dentistry and radiology. The second floor is future-proofed to allow a private hospital facility with four theatres, day surgery, central sterile services department, endoscopy, and ten wardrooms at a later date. The specialist consulting suites provide facilities for cardiology, hearing, oncology, plastic surgery, maternity, urology, and respiratory. The third level provides a plant room to service the entire building.

Services: Cost management
Architect: Warren and Mahoney

WAIKATO HOSPITAL REDEVELOPMENT, WAIKATO

WAIKATO DISTRICT HEALTH BOARD

Since 2004 a number of construction projects have been undertaken to reconfigure the delivery of services to cater for projected population and volume growth in the region, including the redevelopment of Thames Hospital, an acute services building on the Waikato campus, a new clinical centre at Waikato Hospital called the Meade Clinical Centre, a rehabilitation building and forensic mental health unit.

The Thames Hospital redevelopment features a new inpatient unit with 54 beds, a clinical centre with an emergency department and radiology and an ambulatory care unit linked to existing buildings.

The Acute Services building on the Waikato Hospital campus improves engagement between assessment treatment and rehabilitation and sub-acute care, provides better links with the acute stroke unit and rehabilitation services, and a higher rate of bed turn-over. It includes 26 Medical Assessment and Planning Unit (MAPU) beds and 75 short stay general medicine and respiratory inpatient beds.

The final project is the Meade Clinical Centre, a five level, 39,000 square metre building, providing a comprehensive range of acute and ambulatory services.

Services: Cost management
Architect: CJM (Chow Hill, Jasmax & MSJ)
LAKES HOSPITAL SERVICES IMPLEMENTATION PROJECT, ROTORUA

LAKES DISTRICT HEALTH BOARD

Construction of a new three-storey inpatient building, the refurbishment and extension of the existing emergency department, reconfiguration, and refurbishment of the theatre floor in stages whilst the theatres remained operational. A new CCSD department on level three of the existing building was also completed as part of the overall development programme.

Services: Cost management
Architect: Peddle Thorp

NEW PLYMOUTH HOSPITAL CLINICAL SERVICES BUILDING, TARANAKI

TARANAKI DISTRICT HEALTH BOARD

The Taranaki District Health Board and people of New Plymouth have been in desperate need of a new clinical services building, in order to meet the demands of patient needs and provide modern facilities to deliver state of the art technology and services. This new facility is now satisfying this need.

The building [Project Maunga] incorporates a theatre suite, allied health facilities, a 30-bed assessment, treatment and rehabilitation services ward, a 30-bed surgical ward, a 30-bed orthopedic ward and a 60-bed medical ward including Infrastructure updates and car parking. The project was completed in 2014.

Services: Cost management
Architect: Warren and Mahoney
KATHLEEN KILGOUR CENTRE, TAURANGA RADIOTHERAPY UNIT, TAURANGA

KATHLEEN KILGOUR CENTRE LIMITED PARTNERSHIP

The proposed Kathleen Kilgour Centre (KKC) provides a comprehensive external beam megavoltage radiation oncology service. KKC will strive to be a modern centre of excellence in radiation oncology and will provide state of the art planning and treatment software and equipment. The ground floor provides space for three bunkers to initially house two linear accelerators, a wide bore CT scanner, and at Stage II, a high dose rate brachytherapy unit. The first floor of the development provides convenient and ample user friendly parking to its patients, and a link to the existing Bay Health Cancer Centre. The second floor of the proposed building provides the radiotherapy medical support offices and first patient assessment clinic rooms for the KKC.

Services: Cost management
Architect: Wingate Farquhar Architects

TAURANGA HOSPITAL, TAURANGA

BAY OF PLENTY DISTRICT HEALTH BOARD

A complete redevelopment and refurbishment of the Tauranga campus undertaken over a number of stages commencing late 2005 with completion late 2011. The development comprised the construction of a new five level tower and two level podium containing outpatients, SHSOP, allied health, theatres, maternity delivery, SCBU, post-op, pre-op, medical and surgical wards and associated plantrooms.

The balance of the campus underwent a staged strip out and refurbishment for maternity, medical and surgical wards, imaging, MAPU and emergency. Full infrastructure upgrades were also undertaken.

Services: Cost management
Architect: Aecom (Maunsell)
 part of a NZ$343 million redevelopment project, the new hospital replaces substantial parts of the existing campus, some areas of which are over 50 years old. The new building brings the latest standards in hospital care to Wellington and will provide a functional hospital after a major earthquake.

Rider Levett Bucknall provided high-level concept plan budget estimating for inclusion in the business case and detailed elemental estimating and cost planning. The firm also advised on the delivery process of integrated design with construction (i.e. ‘fast track’), preparing documentation for appointment of a ‘preferred tender’, negotiating an acceptable contract value.

Services: Cost management
Architect: CCM Architects

WHAKATANE HOSPITAL, WHAKATANE

BAY OF PLENTY DISTRICT HEALTH BOARD

The Bay of Plenty District Health Board were in need of a modern health facility to serve the population in lieu of transporting patients to the more modern Tauranga Hospital one hour away.

The new Clinical Services Building comprises a new 8,130 square metre single level facility incorporating theatres, emergency, acute care, imaging, medical, surgical and pediatric wards. Full infrastructure upgrades were also undertaken. This new facility links in with existing hospital facilities.

Services: Cost management
Architect: Fitness Fleming Architects
BARROW REPLACEMENT HOSPITAL, BARROW, ALASKA, USA

**ARCTIC SLOPE NATIVE ASSOCIATION**

A 100,000 square foot hospital facility to serve the 5,000 residents of Barrow, Alaska, the northernmost community in the USA. At four times the size of the facility it replaced, Barrow hospital features primary and specialty care areas, a full pharmacy, laboratory, therapy space, emergency department, dental department and other health spaces. Because of the unique conditions of the landscape, the structure was constructed on pilings, supporting the building three feet off the ground to prevent heat loss and allow air to pass beneath it.

Services: Since an initial Market Analysis Study in 2006, Rider Levett Bucknall provided cost management services throughout the design process and provided full contract administration services during construction.

Architect: RIM Architects/HDR, Inc.

HONG KONG SANATORIUM AND HOSPITAL, HONG KONG

**HONG KONG SANATORIUM AND HOSPITAL**

In consideration of the Hong Kong Sanatorium and Hospital’s long-term development needs, Phase One and Phase Two expansion have been completed. Construction for Phase Three began in 2005 and was completed in 2008.

Rider Levett Bucknall was involved in all three phases with a total new floor area of around 50,000 square metres.

Services: Cost management

Architect: Wong & Ouyang (HK) Ltd
JEJU HEALTHCARE TOWN, JEJU, SOUTH KOREA

GREENLAND GROUP

In 2012, Rider Levett Bucknall signed a cost management agreement with Greenland Group for the Jeju Healthcare Town project, which is earmarked as a global healthcare complex to provide rehabilitation and alternative medical centres, water parks, hospitals, longterm care facilities and medical research centres.

With the establishment of Jeju Healthcare Town, Jeju, well known for its scenic setting, is transforming itself into a medical destination for foreign patients. Upon completion, the project will cover about 1,539,000 square metres of land in Seogwipo and comprise a total gross floor area of about 35,600 square metres. The planned investment scale of the project is scheduled for completion by 2015 and is approximately US$830 million.

The project is divided into three areas - Wellness Park, a medical relaxation complex for beauty, preventive care, health and relaxation; Medical Park, a high-tech medical complex for various high-quality specialised treatment services; and R&D Park, a medical R&D complex.

Services: Cost management
Architect: DA Group
Maliha Hospital, Sharjah, UAE

UAE Government

The 220-bed hospital consists of two residential buildings for medical staff, a mosque, emergency helipad, air conditioned ambulance garage, armoury, chemical storage facility and security gate house.

As well as providing medical services, the hospital will function as a cutting edge medical education facility, with an entire floor consisting of three lecture theatres, a library and associated offices, offering the very latest research and excellence in medical education.

Services: Pre-contract services, bills of quantities and contract administration

Architect: RSP MENA Architects

Oasis Hospital, Al Ain, UAE

Oasis Hospital

Situated adjacent to the existing Oasis Hospital, this new facility will provide high quality, international healthcare and services for patients and their families in the city of Al Ain and neighbouring communities.

At over 20,000 square metres, the facility will have a capacity of over 150 beds including specialist wards, state-of-the-art medical equipment and outpatient community clinic areas. The new Oasis Hospital building will feature plenty of natural light, comfortable waiting areas and expanded clinics.

Services: Cost management

Architect: Peddle Thorpe Architects