



WAIKATO INNOVATION PARK

Waikato, the agricultural capital of New Zealand is now the location of one of the worlds leading enterprises, Waikato Innovation Park.

The new Core Facilities building at Ruakura, Hamilton, is a global icon with the architectural aesthetic reflecting the development focus of "growing technology business".

Core Facilities Building Stage 1

The building's exo-skeletal structure and solid black facade were designed to portray a symbol of global prominence emphasising the Park as a World Enterprise. The mass internal space providing areas of communication and interaction within an incubator designed for Research and Development for agri-technological businesses.

The Park which was originally instigated in the 1980's has undergone a succession of prospective developments which finally culminated into a buildable project in 2001. The Parks purpose is to provide and engender science and technology based research and development and is strategically located between the Waikato University and Ruakura Research Campus. The park development is a joint venture between Tainui Iwi, Waikato University, Local Government through NZ Trade and Enterprise, Wel Energy Trust, Hamilton City Council and Trust Waikato funding for the development of the initial stage of the Park.

The site was once part of the Ruakura Animal Research Station, world renowned for its agricultural

*Photography: Jane Sheldon
Photographix*



Aluminium Joinery & louvre system by Origin gives both aesthetic appeal and function. The Glazing system was provided by Pilkingtons.

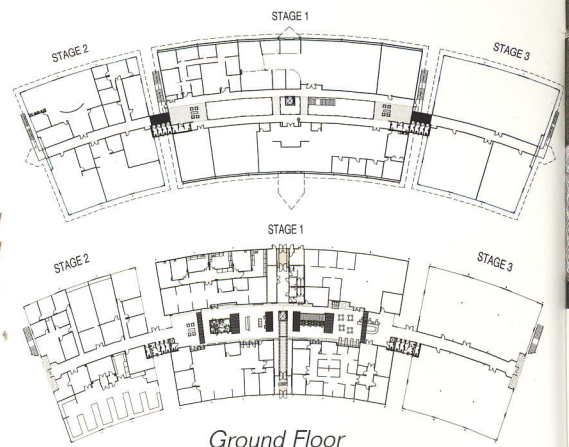


research and development. Innovation Park continues the objectives of the former Research Station with our aim being to commercialise the research being conducted with the research institutions rather than do the research. Centred around the aptly titled Core Facilities Building, businesses will be encouraged to move from the main building to other facilities proposed for the remainder of the Park. The notion of one business growing and expanding then relaying their knowledge and experience back into the new developing businesses.

The Core Facilities building, the first building on the site was designed to be developed in three stages with the aim to meet future expansion needs. Stiles and Hooker, under the direction of Architect and Director Gavin Robins, were commissioned to design and implement the Core Facilities Building. Located at the entrance to the Park development, the building provides a strong visual statement of power and permanence, an anchor for further

complexes that will evolve on the 17 hectare site. It is the first of several planned for the park and houses a collective of established technology based companies located in the "Incubator" or "Business Accelerator" Centre. Stiles and Hooker drew inspiration from the rustic farm building structures and dairy factories once prevalent in the region, an industry Stiles and Hookers own history is also based upon. Stiles and Hooker added contemporary architectural styling with the expectation that the result would signal modernity. Innovation Park is a symbol of modernity yet it poignantly reveals its strong connections to its agricultural and cultural history. Architect Gavin Robins was ardent that the design would reflect both future technologies and innovations as well as respect the heritage of the industry and of the site itself. The curved form engages the notation of outstretched arms of

Floor plans showing the proposed development of stages two and three.





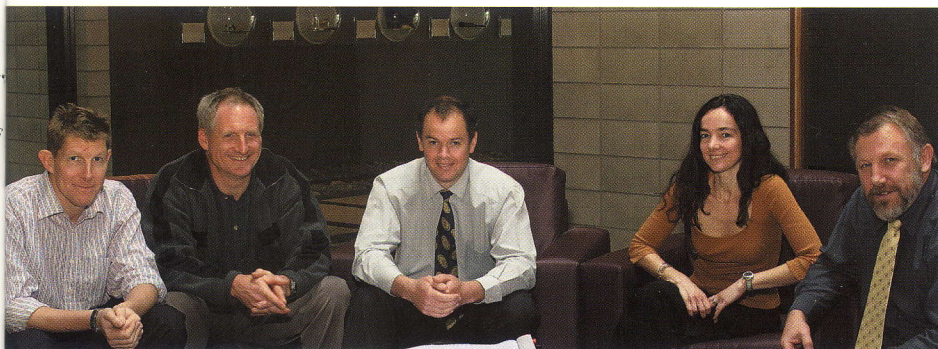
welcome. The main entry located on the curve will be defined by a "Powhenua" anchoring the connection with the local Tainui Iwi lands at the completion of the Park Development.

The 3600m² Stage 1 complex houses 15 technology based commercial tenants, a business incubator, laboratory and a Commercialisation Office to market innovative projects emerging from the incubator. The concept of the Park itself is one of change, growth and innovation which is reflected in the design of the Core Facilities building. Accordingly, the building is equipped with world class leading edge technology including fibre to each tenancy, cat 6 backbone throughout, Krone patch by exception, Cisco Avvid voice over IP, Hp thin client, Microsoft applications, Checkpoint firewall, Cardax FT security and Daikin VRVII air-conditioning.

Unique to the internal working of the building is the conceptual emphasis on circulation and common space. Formed around a curved crucifix spine, the central core becomes the focus, labelled the "street" for its parallel semblance to public meeting spaces such as streets and malls. Contained within a double height space the "street" is punctuated by peripheral balconies, amenities and services, comfort zones and air bridges linking the upper level spaces. Comfort zones and casual meeting areas are interspersed on the level one platform and form common meeting areas for presentations and discussions, serving a multi-functional purpose as public space, meeting areas,

cafes, amenities, casual lease kiosks, circulation and graphic displays. All tenants within the complex share an interest in collaborative business environments, a poignant basis for the spatial design of the tenancies which are juxtaposed to the "street" encouraging interaction and the exchanging of ideas adding another view to the notion of Research and Development. The building acting as a resource to turn potentially valuable ideas into methods and products that can be commercially developed and marketed. The synergies between the various diverse tenants selected under strict and defined criteria, harbour and nurture new and innovative advancements in the agri-technological fields. The Interior Architecture of the space enhances the informal, often accidental exchanges of information and ideas.

The building structure is an exo-skeletal steel frame with comfort metal tee floor structure spanning up to 12 metres. Bryce Weal, Director of Stiles and Hooker and Project Engineer, managed a team of Engineers and Technicians who devised an innovative way of spanning these long distances. Black corrugate cladding was chosen for statement of power and dominance, its industrial appearance and ability to mold into the desired curve form, while large red aluminium louvres provide a visual contrast to the monotonal industrial materials. Downpipes are finished in Zinalume[®] coated steel accentuating the functions of the building, again providing an elegant reprieve from the solidity of the building structure.

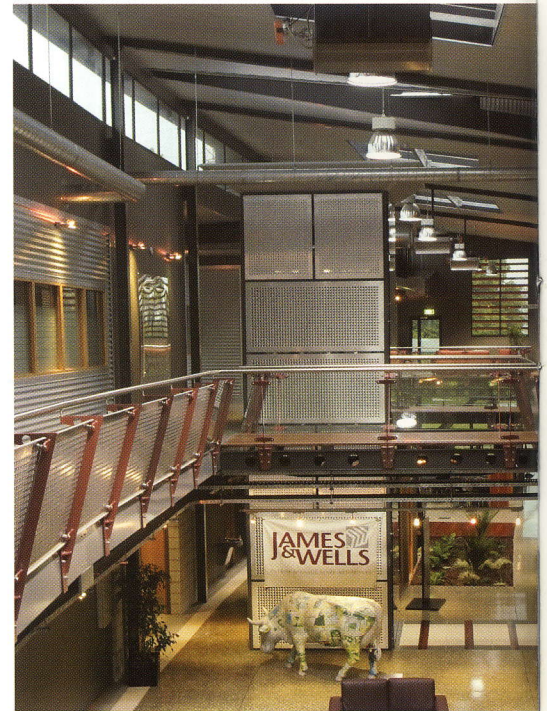


Development team of stage two. From left; Chris Zillwood Innovation Waikato, Ian Gilby Stiles and Hooker, Derek Fairweather CEO Innovation Waikato, Laura Monzon Stiles and Hooker and Gavin Robins, Director, Stiles and Hooker.

Internally, the building continues this visual synergy of materials, the design reminiscent of industrial dairy and agricultural factories. The space is an open void drawing attention to the internal building envelope where services hover in the immense space. The soffit of the floor is exposed in the public spaces from which building services are suspended in an orderly array. Material elements of the building were selected to reflect the industrial/agricultural nature of



Interior Balustrades crafted from stainless steel by J.P. Marshall add to the aesthetics and modernity of the high tech image.



the region and where possible left in their natural raw state to reduce ongoing maintenance cost. Aluminium and stainless steel pipes and ducts are complimented by light glass panels and rich jarrah timber flooring. Colour is minimalist, neutral greys provide a backdrop to the rich materials implemented. Tenancy walls maintain a visual connection through glass panels, the joinery surrounding the glass panels constructed from "plane" trees felled in areas adjacent to the park some years previous. Each stage of the Core facilities building is linked to the other by way of a clear glass corridor. A symbolic interpretation of the existing and future links created through the Research centre locally, nationally and internationally. The exo-skeletal structure and exposed service networks were designed to express the technologies that would generate from within as well as providing ease of access and flexibility for extensions. The core working organs are expressed to emphasise the building as a living, functioning form.

The Schindler Lift (partly showing at top left) is transparent, a specific design feature allowing occupants a vista of the complex.



Stiles and Hooker. Company Profile

Stiles and Hooker is a well established and highly experienced Hamilton and Auckland based consultancy. Renowned both nationally and internationally Stiles and Hooker has successfully completed prestigious projects throughout New Zealand, Australia, Papua New Guinea, The Republic of Ireland and Hong Kong. Established in the 1960s, Stiles and Hooker formed a unique partnership between Architecture and Engineering. We believe that our multi-disciplinary company offers our clients the "added value" throughout the design and implementation process. The team of 27 professional staff members and 3 support staff offer expertise in Project Management, Architecture, Structural and Civil Engineering, Interior Design and Fire Design.

Stiles and Hooker team of Structural and Civil Engineers, Architects, Interior Designers, and Technicians specialising in Commercial, Retail, Civic, Healthcare, Education, Industrial and Residential Projects, with a strong history of successful design projects Stiles and Hooker

provides innovative designs while demonstrating competence and knowledge of the entire construction process. Its diverse team allows an array of design styles from contemporary through to cultural and heritage buildings. The synergy between the Architecture, Interior Design and Engineering disciplines allows the creation of innovative and unique design solutions and maximises quality and cost performance.

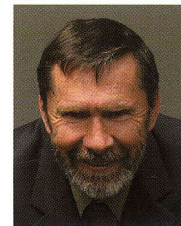
Engineers at Stiles and Hooker are responsible for all the Major Industrial Plants with specialist expertise in the Dairy Industry. The team has successfully completed projects for major corporations including Fonterra, Anchor, Inghams, Sanfords, Riverlands and numerous Commercial and Industrial projects.

Our Core Philosophies implemented throughout the design process are to:

1. Provide innovative solutions for Architecture and Engineering.
2. Design Cost Effective solutions to meet client budgeting needs.
3. Ensure a high level of performance on all projects within given time frames and budget constraints.



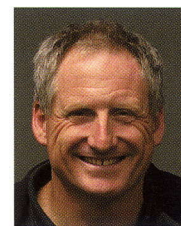
From the left
Gavin Robins
ANZIA Registered
Architect
Director



Bryce Weal
BE NZCE MIPENZ
Professional Engineer
Director



Iain Brown
ME CEng MStructE
MIPENZ
Professional Engineer
Director



Ian Gilby
NZCD
(Architecture)
Associate



Stephen Thurman
BSC
Associate



Tessa Roulston
BDES Interior
Architecture
(Honours)
Interior Design
Manager

4. Formulate a successful team with the Client, Architects, Engineers, Designers, Consultants and Stakeholders.

*Architects: Stiles and Hooker Ltd.
Gavin Robins
Telephone 07 839 1254
Fax: 07 839 1255
e-mail: admin@stilesandhooker.co.nz*

*Engineers: Stiles and Hooker Ltd.
Bryce Weal.*

*Mechanical/Electrical Consultants:
Micon Engineering*

*Construction Managers:
Arrow International Ltd.*

*Tenacy Fitout Design:
Stage1 Maunsell Ltd.
Stage 2 Stiles and Hooker Ltd*

*Structural Steel:
Waikato Steel Fabricators*

*Roofing/ Cladding Manufacture:
Wall Cladding: Dimond Corrugate
Roof: Dimond Spandek
Internal Ceiling: Dimond perforated
Corrugate
Telephone: 0800 Dimond (346663)*

*Roofing/ Cladding/ Ceiling Installer:
Project Roofing Ltd.
Telephone: 07 849 1700*

Comflor Suspended Floor: Corus