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Cover image: Cardno Bowler providing geotechnical services for the Leighton Abigroup Joint Venture, Gateway Upgrade Project, Brisbane, Australia.
Welcome to another edition of Cardno News.

2008 has already proven to be a highly successful and prosperous year for the Cardno group. Along with our continued international diversification and record financial performance, Cardno has continued to evolve its service initiatives and operational performance to ensure that we remain leaders in all that we do.

In March, 140 of our senior managers from around the globe came together for a three day conference on Queensland’s Sunshine Coast. The conference was a chance for managers to discuss the company’s updated five-year strategic business plan and participate in valuable forums about Cardno’s vision of becoming a world leader in the provision of physical and social infrastructure services.

The conference also gave managers an opportunity to confirm our commitment to company values, service and operational excellence. By employing our values and working in collaboration with clients and business partners we will continue to deliver quality projects and programs around the world from which Cardno has earned its reputation.

Earlier this year we welcomed Bowler Geotechnical into the Cardno group to form Cardno Bowler. Bowler Geotechnical has an enviable reputation in the Australian construction and urban development sector for delivering superior geotechnical engineering and construction materials testing services. The acquisition brings another 230 staff to the Cardno group and enables us to offer market-leading geotechnical services to our clients.

In March, Cardno announced the acquisition of UK based water engineering software company Micro Drainage. Micro Drainage’s innovative product range has received strong support from UK regulatory authorities and is used by civil engineers in government agencies, private entities and consultancies and academic institutions.

This year I have enjoyed getting around meeting our staff (both existing and new) and talking with them about the values and strategies that are the heart of our business. Our staff, along with our clients, are key to our business and provide a platform for continued service excellence, sustainable growth and financial success.

At Cardno we have great pride in our talented people, their outstanding efforts enable us to look to the future with great optimism. We are committed to realising the potential of our people and have announced a number of new incentives and initiatives which aim to enhance their career paths and continuously improve our workplace.

As you will see in this issue, Cardno has had some outstanding project wins in recent months in our major service areas including water, urban development, waste management and international development assistance.

I hope you enjoy reading this issue of Cardno News.

Andrew Buckley
Managing Director
A fresh approach for infrastructure management

Cardno has entered into a program alliance with Mackay Regional Council that has the potential to change the way local governments manage their capital works programs.

The alliance, which features Tenix Alliance as lead contractor with Cardno and Parsons Brinckerhoff as consultants, will see the three companies work with Mackay Regional Council to deliver their water, sewage and other selected infrastructure projects for the next five years.

It is believed to be one of the first Queensland local government program alliances formed specifically to deliver capital works in Queensland.

Cardno Water Management Area Manager for Queensland/Northern Territory John Graham said it was the first time Cardno had entered into such an alliance but he expected the practice to become more prevalent in coming years when people saw the great results being achieved by this innovative approach.

"The move towards program alliances is one we'll see more of in the future as all levels of government look for more effective ways to plan and deliver critical infrastructure," he said.

Mackay Regional Council Water and Waste General Manager Ken Vaheesan said Cardno staff were playing a key role in helping shape the future of the region.

"Cardno staff have provided valuable input into the design of the major projects," said Mr Vaheesan.

Mr Graham said there were a number of large infrastructure projects already being delivered by alliance methodology because it had the benefit of delivering projects on time, on budget and with incentives for innovation and savings, which were then shared between the alliance partners including Council.

The initial work packages for Mackay Regional Council comprise a number of key projects including the construction of water and wastewater mains and reservoirs, wastewater pump station upgrades, a new water treatment plant, car park and new Council depot.

In addition to project delivery, the alliance involves a program support team focused on the upfront planning and development of the capital program, individual project justifications and scoping of individual projects.

Mr Graham said Cardno had deployed four staff to work full-time on the alliance including Strategic Asset Management Manager Rolf Rees.

"Rolf was born and bred in Mackay and as he was keen to return to the town he grew up in, it made sense for us to tap into his local knowledge," he said.

Mr Vaheesan said the relocation of skilled staff had been significant and provided a good outcome for the community.

"The availability of skilled workers has provided a platform to ensure the projects will be delivered," he said.

Mackay Regional Council is one of the four fastest growing regions in regional Australia and the Queensland Government predicts that with a population growth of three per cent a year, it will become the state's second largest regional city behind Cairns by 2026.

"This alliance will allow the Mackay Regional Council to plan and deliver its essential infrastructure just in time to support the ongoing, rapid growth in the Mackay region," Mr Graham said.

The initial term of the contract is five years, with the option of a five-year extension.

The Mackay Alliance Project is believed to be one of the first Queensland local government program alliances formed specifically to deliver capital works in Queensland.
Cardno's past successful mergers were a key factor in Bowler Geotechnical’s recent decision to join forces with the company. The geotechnical engineering and materials testing business, which is now known as Cardno Bowler, joined the company in February.

Bowler Geotechnical director and founder David Bowler, who will head up a newly created Cardno geotechnical division, said being part of the larger operation had already allowed the business to offer clients a broader range of services. “Cardno’s proven merger model, as well as the ability to cross-sell, was a huge plus for our team in deciding to sign off on the proposal,” he said.

“The ability to offer clients additional services influenced our decision to partner with Cardno and we believe it can provide the crucial resources and support to grow the business.”

With more than 200 staff, Cardno Bowler is one of the largest groups providing materials testing services in Australia and has provided testing services for more than 10,000 projects including the M7 Motorway in Sydney, the Goro Nickel Project in New Caledonia and major infrastructure projects in South-East Queensland such as the Tugan Bypass, the Gateway Motorway duplication, the North-South Bypass Tunnel and the Ipswich Motorway upgrade.

The business comprises 16 permanent laboratories in Queensland, New South Wales and Victoria, as well as an additional 16 mobile laboratories, including one in New Caledonia that allow it to service large national and international clients.

Cardno Managing Director Andrew Buckley said Cardno Bowler would supplement the group’s existing Australian-based consulting engineering business. “This acquisition is complementary to Cardno’s existing engineering and physical infrastructure services and will enable us to expand our geotechnical and environmental engineering capabilities to a broader client base across Australia and the world,” he said.

“Our expansion in the geotechnical and materials testing area follows the success of the 2005 acquisition of Darwin and Mackay-based Cardno Ullman & Nolan and Cardno Bowler’s already established network will form the platform for further growth.”

Bowler Geotechnical’s former owners, including key members of its management team, are committed to remain with Cardno Bowler.
Armenia is a country in transition and the team from Emerging Markets Group (EMG) is at the forefront of a ground-breaking initiative to ensure one aspect of that transition is as smooth as possible.

The former Soviet state lies to the east of Turkey and the north of Iran, but it’s the state of its financial system that has been occupying the thoughts of EMG for the past two years.

EMG Director of Financial Sector Development Tony Sinclair explained that Armenia has some fairly unique economic circumstances. “On the one hand Armenia has a relatively high level of poverty but it is also one of the fastest growing countries in the region largely due to external factors such as Armenians working abroad sending money home to their families.

“Because of these external cash flows into the country, the financial system traditionally hasn’t had a lot of pressure to perform. But as there is a greater need to reduce poverty, the functioning of the financial system becomes a much more important aspect of the country’s economic development.”

With that in mind, the US Agency of International Development (USAID) has contracted EMG to implement the Armenia Financial Sector Deepening Project (FSD), a five-year initiative that is focused on improving the quality, depth and scale of financial systems in Armenia.

The ultimate goal of the project is to support the development of a self-sustaining financial system that provides affordable access to capital, mobilises domestic savings, enables risk management and facilitates trade and commerce.

“This is one of the largest and most technically diverse financial sector projects in the USAID portfolio and EMG is focused on identifying and removing obstacles that prevent the financial system from doing its part for economic growth and poverty reduction,” Mr Sinclair said.

“We are working with both public and private sector institutions to provide technical assistance, foster public-private dialogue and partnerships, deliver training and develop financial system infrastructure.

“We want our efforts to positively impact on the lives of ordinary Armenians, not just a few.”

Three EMG consultants have taken up long-term residencies in Armenia to implement the project, while the company has also employed 20 local professionals to coordinate technical teams and provide support. An EMG home office team in Washington manages the project.

A key feature of the FSD project has seen EMG working closely with the Central Bank of Armenia in its new role as a unified regulator with authority over all industries, with the ultimate goal being more effective supervision and increased public trust and confidence, setting the stage for increased investment in the sector.

Despite it being only the second year of the project, Mr Sinclair said success stories had already unfolded.

“We've helped a local Armenian bank publicly issue a corporate bond, which was the first public issue of a corporate bond by a bank in Armenia,” he said.

“We have been helping to create innovative funding projects for banks. We are also assisting the Central Bank in its discussions with a European stock exchange regarding a merger and providing support for inward investments and development of a domestic insurance industry.

“This is an exciting time for the Armenian financial sector and also for all of us at EMG.”

A sound investment for all Armenians

“We want our efforts to positively impact on the lives of ordinary Armenians, not just a few.”
Preserving a rugged paradise

The stunning landscape that has inspired nature lovers to purchase a piece of paradise at the Serenity Cove development on New Zealand’s North Island is the very thing that has provided the most challenges for the civil infrastructure team from Cardno TCB.

“What has made this development attractive to people is the beauty and the ruggedness of the countryside and one of the most important goals for us has been to not spoil that beauty,” Cardno TCB Director Phil Rielly said.

“Environmental management has been a major focus for our team, especially during the construction period, as we don’t want to adversely affect what is a truly beautiful setting.”

Set on the shores of Lake Whakamaru, Serenity Cove is the latest ‘farm park’ to be developed in New Zealand, a concept where people buy residential lots with areas of approximately 2,500-3,500m² to build a house on and also receive a stake in a company that farms the balance of the land.

As shareholders, the residents elect a board of management, with a farm manager and advisor employed to run the farming operation.

In the case of Serenity Cove, developer Serenity Cove Development Ltd is creating 50 home sites on the 234ha farm park, with the majority of construction already completed and land titles anticipated to be available by the middle of 2008.

Serenity Cove Development knew where to come when it was time to contract a firm to complete all the detailed roading, earthworks and services design.

“The client chose to contract us because of our engineering and surveying skills as there is quite a network of roads, as well as services such as water and power, to be put in place,” Mr Rielly said.

Cardno TCB has also been responsible for topographical and legal surveying, including road stopping, lot creation and adjustments to Department of Conservation boundaries surrounding the site, as well as letting tenders and supervising construction.

Serenity Cove Development Ltd Principal Kevin Baker said Cardno TCB had done a superb job of maintaining the site’s natural beauty.

“Their team took particular care in ensuring our development blends in with the landscape that makes this such a special part of the world,” he said.

“This was a unique project that required a high level of expertise and we are very pleased with the results Cardno TCB has delivered.”

Mr Rielly said there had been a few areas where ensuring roads fit into the landscape had posed an engineering challenge.

“There have been some very big cuts up to 20m in height through highly erodible pumice and sands to get road access through some of the difficult terrain and on to the flatter farm land,” he said.

“Other parts of the site have required rock blasting to achieve the necessary road alignments and we have also had to put in place very strict erosion and settlement control plans to make sure the construction doesn’t affect any of the waterways or the lake.”
War against waste

Mindarie Regional Council is the single biggest provider of waste management services in Western Australia and this facility will allow it to minimise as much waste as possible from going to landfill sites. Government and the private sector are embracing the challenges of climate change.

The war against waste has never been more important than in these times of climate change and one company playing a pivotal role on the frontline in Western Australia is Cardno BSD.

Since 2001, Cardno BSD has been working alongside joint venture partner Meinhardt on an innovative Resource Recovery Facility that will form a key component in assisting Mindarie Regional Council (MRC) work towards a zero waste target.

The MRC, which comprises seven local governments in Perth's northern suburbs, is one of several in Western Australia taking a new approach to waste management.

"There is a definite push by the Western Australian Government to reduce the amount of material being sent to landfills," Cardno BSD Principal Andrew Mack said.

"More and more councils are implementing innovative strategies that focus on a zero waste policy, with the ultimate goal being that no waste ends up in a landfill and all of it is reused in some way, shape or form.

"A Resource Recovery Facility is one way of helping to achieve this and while a couple of councils in Perth have already implemented them, the Mindarie Regional Council facility will certainly be the largest."

Once completed in mid-2009, Stage 1 of the Resource Recovery Facility will divert 100,000t of household waste per year from landfill. More importantly, 70 per cent of this material will be processed at this facility into a high-grade marketable compost.

Future stages are envisaged to provide for additional materials recovery.

Cardno BSD has been responsible for project management of the Resource Recovery Facility, with its duties including scoping of locations and technologies, community consultation and overseeing the tendering process and environmental approvals.

"Mindarie Regional Council is the single biggest provider of waste management services in Western Australia and this facility will allow it to minimise as much waste as possible from going to their landfill sites," Mr Mack said.

"With governments and the private sector embracing the challenges posed by climate change, our team is committed to helping them achieve their goals."

Mindarie Regional Council Chief Executive Kevin Poynton said Cardno BSD had played a crucial role in ensuring the dream of a Resource Recovery Facility becoming a reality.

"After a lengthy approvals process, construction has now started on the facility and we are extremely pleased with the work Cardno BSD has done thus far," he said.

"A number of different parties were required to sign off on the project and the team from Cardno BSD made a significant and important contribution, through their knowledge and expertise, in ensuring the process went as smoothly as possible."
A homely community for the future

Mimi Doukas has worked on numerous master planned communities during her decade at WRG Design Inc but very few have been created by someone as inspirational as Joan Austin.

"Joan dreamed of creating a special place within her community before I was even born. Somewhere people could live, work, shop and play, and now in her mid-70s she is about to see her vision become a reality," she said.

The special place Mrs Austin dreamed of creating is Springbrook, a 180ha community within the City of Newberg, Oregon, and Portland-based WRG Design has guided the development team through the master planning process since 2004.

Several years of community forums, planning commission hearings and, most importantly, hard work paid off in September last year when the Newberg City Council voted to approve the Springbrook masterplan.

The proposed master plan features a mixed-use, pedestrian-friendly community with a range of density and types of housing, revitalisation of the historic Springbrook Village, neighbourhood-scale commercial services, employment uses and a resort designed to complement the many wineries located in the region.

Ms Doukas, who is a Planning Director at WRG Design, said Mrs Austin had started purchasing property to create the community more than 35 years ago.

"Joan is overseeing the development with the care one would expect from a neighbour and we worked for a long time trying to put her vision down on paper," she said.

"It took some effort to set aside our preconceived notions and development templates but we eventually learned that this family knew their community like it was part of their family.

"In turn, we have taught them about land use law and engineering principles and the best lesson learned over the course of the past few years is partnership."

Construction has already commenced on the 85-room, luxury hotel and spa, with WRG Design currently preparing the Master Subdivision Final Plat application. This document will create a handful of buildable lots and a series of development parcels that can be further subdivided.

Mrs Austin said WRG Design deserved praise for the way it had managed the process of steering the project through its development phase.

"We told them what we wanted – a compact development, a walkable community, citizen involvement and care for the environment – and WRG delivered on every count," she said.

Ms Doukas said the Springbrook project had proven it was possible to create a master planned development that was intimately tied to a larger city.

"This has been a unique opportunity to work with a private property owner who is driven primarily by a vision for what her hometown can become in 20 years, rather than designing a project based on a short-term market response," she said.

"Joan and her family know that success will not simply be a balance sheet of rental rates and residential velocity. They are part of this community and their neighbours will tell them if the traffic fails or the parks fall into disrepair."

"We told them what we wanted – a compact development, a walkable community, citizen involvement and care for the environment – and WRG delivered on every count."
Consolidating South-East Queensland’s water infrastructure

Even a casual observer would recognise the enormity of the Queensland Government’s plan to consolidate South-East Queensland’s regional water assets as part of a major reform of the institutional arrangements for provision of water supply.

The reform, which has resulted in the establishment of a regional bulk water supply entity and a regional bulk water transport entity, saw bulk water assets worth close to $2 billion transferred from numerous local governments and other regional water service providers to State Government ownership.

Queensland Treasury engaged Cardno’s Management Services Business Unit to undertake a Technical Due Diligence on behalf of the State Government in order to determine the condition and value of assets being transferred.

The Cardno team was involved in the assessment of asset valuation and asset management processes utilised by 25 existing water service providers and the condition assessment of hundreds of water supply facilities and assets, as well as the modelling and development of 30-year capital and operational expenditure projections for each agency transferring assets to State Government ownership.

“To work on a project such as this truly was a once-in-a-lifetime opportunity,” Cardno Project Director Kerry Jones said.

“So many things were happening at the same time. Not only did we have a tight timeframe to get the job done, but it was also being played out under a political climate of council amalgamations and the worst drought in history.

“It’s been a great exercise to work on and we’re very proud to have been associated with this leading-edge project.”

As lead consultant on the technical due diligence process, Cardno mobilised a team of almost 80 people within two months of commencing work on the project, including staff from a number of Business Units within Cardno and a team of national and international sub-consultants.

The technical due diligence project, the outcome of which enabled the State Government to determine a compensation figure for local governments, was completed in December 2007.

As a follow-on to the project, Cardno has now been retained to work for Queensland Treasury and the new bulk water entities that have been established.

“Cardno has built an excellent knowledge of water, wastewater and drainage systems across South-East Queensland during the past 40 years and has previously worked with councils in the areas of asset management, financial modelling, asset registration and valuation, as well as on the planning and design of their water infrastructure.

“Achieving project outcomes was assisted by the fact that a number of our specialist staff had previous experience at senior management level on various water boards and local government water service providers, together with a number of key team members having had experience working within State Government.”

Mr Jones said the project required knowledge of the water supply schemes in South-East Queensland and specialist skills in asset management and performance benchmarking.

“This wasn’t a run-of-the-mill engineering job,” he said.

“Our team needed to have a good understanding of financial and legislative matters relating to the water industry, particularly as we were required to work alongside financial and legal consultants.

“Knowledge of what was driving the reforms, keeping a constant eye on the required outcomes and considering the limited time available, the project had to commence on multiple fronts at the same time requiring extensive coordination and oversight.”

“Cardno has built an excellent knowledge of water, wastewater and drainage systems across South-East Queensland.”
Cardno Acil’s commitment to improving development assistance outcomes

Cardno Acil has taken its commitment to aid effectiveness to a new level through the implementation of a ground-breaking framework that will govern future management of its projects.

The Effectiveness Framework is the result of a rigorous joint review with AusAID, the Australian Government’s overseas aid program, and provides a frame of reference covering four aspects of effectiveness – organisation; systems and processes; activity management; and monitoring and evaluation.

The review was inspired by a similar quality reporting assessment process undertaken internally by AusAID. Recognising the benefits of this new system, Cardno Acil proposed a joint review of a sample of AusAID activities under its management.

With Cardno Acil the only managing contractor to have offered to be involved in such a process, AusAID has been very supportive of the initiative and recognised the value the company’s perspective has brought to its assessment process.

Cardno Acil International Division Manager Charles Tapp said he expected the review and framework to have benefits both internally and externally.

“Honest assessment is good and asking hard questions about sustainability, such as whether we are achieving objectives, is also positive,” he said.

“Often we may be implementing a program that is going well according to the contract and the client’s wishes but may not be achieving the program’s objectives. “This has been an opportunity for us to engage the client on some of the important issues that we haven’t had an avenue to address openly before.”

A sample of nine AusAID activities under Cardno Acil management was selected for review, with the aim of building a shared understanding of what makes aid effective, adding value to AusAID’s reporting process and learning ways Cardno Acil can consistently improve development outcomes.

Analysis of the review’s findings led to the drafting of the Effectiveness Framework, with Cardno Acil defining effectiveness at its core as being about achieving objectives, enabling sustainability and demonstrating results.

Cardno Acil Senior Consultant Kobi Maglen and Executive Manager of Operations Bruce Coyne presented the findings from the joint review and the Effectiveness Framework at a seminar at AusAID late last year.

The seminar included discussion of the implications of the joint assessment in relation to the way AusAID and managing contractors work together to enhance aid effectiveness, as well as Cardno Acil’s approach to effective aid delivery based around the Effectiveness Framework.

Working groups have since been established to put machinations into action that will sit behind the framework to ensure effectiveness is core to Cardno Acil’s day-to-day work.

The Effectiveness Framework will also be reviewed for continuous improvements so that it remains an up-to-date and workable process.
Flood management solutions for our communities

A water engineering software firm that designs and simulates cost-effective and sustainable drainage solutions to limit the environmental impact of extreme flooding events is the latest company to join the Cardno family.

Founded in 1983 by Aidan and Marian Millerick, Micro Drainage is the dominant provider of drainage design software to engineering consultants and water companies in the United Kingdom and Ireland.

Since its inception, the UK-based firm’s innovative product range has received strong support from British regulatory authorities and is used by civil engineers in government agencies, academic institutions and private entities and consultancies.

Cardno Managing Director Andrew Buckley said the acquisition of Micro Drainage would complement the operations of XP Software, the company’s long-established Australian and US-based water engineering software business that has representation in eight countries.

“By leveraging XP Software’s extensive international network, Cardno has the ability to market Micro Drainage’s product range worldwide,” he said.

“In addition, we will be able to offer existing XP Software customers a complementary and in-demand product suite, with both XP Software and Micro Drainage’s products helping engineers to plan and design better water management solutions for our communities.

“This merger creates a true holistic design, analysis and modelling capability for the world’s civil engineers.”

Both Aidan and Marian Millerick will remain in the company, with Aidan also taking on a broader role as Discipline Leader of Water Modelling to ensure his technical knowledge of the field is shared across the Cardno group of companies.

Mr Millerick, who has been Micro Drainage’s Managing Director since its inception, said the company had become the market leader in its field in the United Kingdom and Ireland during the past 25 years, with developing markets in Europe, the Middle East and Asia.

“The majority of water engineering consultants and water companies in the United Kingdom use our software and in Cardno we have found an ideal partner to support our future growth and international expansion,” he said.

“Cardno has the unique perspective of knowing how to run a successful software company, combined with an extensive team of in-house water resource practitioners who understand the importance of such software in designing sustainable and cost-effective solutions for their clients.”

Micro Drainage is the developer of the UK’s industry-standard drainage design software suite WinDes®, which allows users to simulate the environmental impact of extreme rainfall, climate change and urban development, thereby facilitating the design of the most sustainable and cost-effective storm water and wastewater solutions.

“The global civil engineering landscape is evolving rapidly to keep pace with climate change, accelerating urban development and the drive to sustainability,” Mr Millerick said.

“By bringing together the proven capabilities of Micro Drainage and XP Software, Cardno has created a team with the research, development and distribution resources to address the growing world market for our software.”

“The global civil engineering landscape is evolving rapidly to keep pace with climate change, accelerating urban development and the drive to sustainability.”
Minimising impact in the Illawarra

Eighteen months of hard work on an environmental assessment for a proposed coal wash emplacement facility at Illawarra Coal’s West Cliff Colliery has paid off for Cardno Forbes Rigby, with the client receiving an unprecedented one-page approval document from the State Government.

"On issues as complex as this, governments usually hand you an exhaustive approval document that can be dozens of pages long with requests for further information," Cardno Forbes Rigby Water Engineering Senior Manager Anthony Barthelmess said.

"So you can understand why we were just completely blown away when the New South Wales Department of Planning handed us a single A4 page approval.

"We were just so pleased when that approval document came back. We were expecting a short novel and to get a one-pager speaks volumes for the comprehensive nature of the application, the level of work that went into it and the commitment from our client."

The environmental assessment centred on the design of a new emplacement area for refuse coal from the West Cliff Colliery 15km south of Campbelltown in Sydney’s west.

The application proposed transporting refuse coal to a 60.5ha site with a total capacity of more than 30 million tonnes and a maximum design height of about 65m, providing many years of additional emplacement.

"There was the potential for this proposal to be environmentally damaging and we are quite proud that our input has ensured we were able to turn it into something that I honestly don’t believe will significantly impact on the environment," Mr Barthelmess said.

As lead consultants on the environmental assessment and approval documentation, Cardno Forbes Rigby undertook surface water hydrology and hydraulic studies to determine the water balance at the mine site, together with hydrologic and groundwater interaction models.

Water quality modelling and monitoring also formed a major component of the assessment.

With the Department of Planning giving the emplacement area the green light, Cardno Forbes Rigby has now been preparing detailed engineering designs for the site including associated water quality ponds, bypass channels, dirty and clean water channels and infrastructure such as roads.

Construction of the emplacement area is expected to start in late May, with the company to provide construction supervision for years to come.

"The biggest challenge has been ensuring the environmental outcomes are up to 2008 standards," Mr Barthelmess said.

"The last approval Illawarra Coal had to get for an emplacement area was some time ago and the world has come a long way since then in terms of what’s expected of current projects from an environmental perspective.

"It’s just about bringing the design up to, and exceeding, an environmental standard that’s acceptable by the government agencies, the community and other key stakeholders."
In any company's experience, recruiting the right person for the job is at times difficult, especially in a talent rich but competitive international market.

Recruiting becomes more pivotal when you add to the mix relocation to a developing country, which means a different culture and environment to live and work in.

This is something Cardno Acil knows all about, with the company having spent more than 35 years designing and managing more than 500 development projects, programs and facilities across 63 countries in Asia, the Pacific and Africa.

Cardno Acil Recruitment Manager Glenda Pitt explained the need to consider not only a candidate's technical skills as well as their autonomy and ability to develop the skills of those they work with.

"We want to know how they will act, participate and do the job they are recruited to fill. This means we need to conduct an 'on the job' process to analyse and assess their behaviour in a cross-cultural environment."

Cardno Acil undertook an intensive review of its international recruitment and selection process in Papua New Guinea in a bid to study how it has recruited in the past and ways to improve the process for the future.

The company conducted an informal review of four of its projects in the country, which included interviewing previous recruits about how they found the recruitment process and speaking with clients to ascertain their perceptions and ideas on the recruitment of candidates for projects.

Following the survey process, Cardno Acil's recruitment team developed an assessment approach that allows government officials to select candidates through job analysis, interpersonal skills and social and team conduct.

The Assessment Presentation Approach was formulated and implemented as a pilot on the Law and Justice Sector Program in Papua New Guinea.

"The Assessment Presentation Approach is used to assess a candidate’s level of understanding of a designated subject matter that would pertain to the position," Ms Pitt said.

"This is replicated by providing the candidates with a work scenario that they would encounter in this role."

One of the key features of the assessment approach is the practice of interviewing...
potential recruits in the country they are hoping to relocate to.

Cardno Acil previously completed the recruitment for the Law and Justice Sector Program in its Melbourne headquarters, which meant that Papua New Guinean officials would have to travel to Australia to participate.

“What this did was keep the candidates in an environment they were familiar with and the government officials in unfamiliar surroundings,” Ms Pitt said.

“We decided the candidate would be the person to travel and meet the panel of government officials in their workplace.”

Cardno Acil has implemented this process successfully, with a full-day assessment including a panel interview, a work scenario presentation made to the panel and prospective team members the candidates would be working with, a meeting with the Program Manager and a social meet-and-greet with the Law and Justice Sector project team members.

“We need to ensure that candidates present themselves in an appropriate manner and establish if they are a team player in the assessments,” Ms Pitt said.

“It becomes clear in the presentation assessment by the manner they present and demonstrate examples of how they would complete the work scenario. It is also reflected by the audience in gaining their interest and participation at question time.”

A tour of the environment is also part of the approach and candidates get an overview of where they would be working and living. This completes the all-day assessment, with the recruitment team once again paying attention to how candidates interact with locals and team members.

“When relocating to a cross-cultural environment, there’s always the possibility that even the most experienced traveller may be confronted by things they aren’t accustomed to, such as living in a compound and having their freedom of movement restricted,” Ms Pitt said.

The success of the Assessment Presentation Approach in Papua New Guinea has inspired Cardno Acil to advocate the process to other projects and programs in developing countries.

“This would involve adjusting the approach to be suitable to the environment, culture and recruitment capabilities and requirements of each individual project,” Ms Pitt said.

“It is crucial that our recruitment processes are continually improved to build strong foundations for future opportunities. The most important thing we’ve realised is that we have to take a culturally relevant approach.”
An award winning vision

Cardno BSD has received professional recognition for its work on a landmark project that is helping to build communities in Perth's rapidly expanding South West Corridor.

Since 1999, Cardno BSD has been the planning consultant for the Cockburn Central Town Centre development, one of the Western Australian Government's integrated land-use and infrastructure programs and a local model for 'Transit Orientated Development' (TOD).

The Planning Institute of Australia (PIA) recognised the significance of the development last year when it presented Cardno BSD and the State Government's property developer LandCorp jointly with the 2007 WA Planning Minister's Award for Planning Excellence and a commendation in the category of Urban Planning Achievement.

Cockburn Central, which will ultimately service a population of more than 200,000 people who live and work in the area, will provide a range of retail, service, business, industrial and recreational services integrated with the new Cockburn Central rail station.

Cardno BSD Director Jenny Smithson said TODs were an important part of the Government's strategy to encourage Perth's rapidly expanding population to better utilise public transport and to maximise the Government's investment in major infrastructure projects.

“LandCorp's objective was to develop a sustainable town centre supported by high-density, quality residential development linked to existing and planned transport nodes,” she said.

“Cardno BSD has been on board since 1999 when, as WA's premier land development agency, LandCorp appointed us to provide urban design and statutory planning services for the project. The vision from the beginning was to create a sustainable TOD that would serve as a model for contemporary metropolitan regional centres.”

From initial concept development as part of LandCorp's project team, through to detailed subdivision design and approvals, Cardno BSD has played a key role in ensuring that the vision was not lost.

It was also a key objective for LandCorp to ensure that elements of the town centre were underway when the rail station opened in late 2007.

“To assist in achieving the vision, we prepared design guidelines to promote the development of vibrant main streets with a diverse blend of retail, commercial and residential buildings,” Ms Smithson said.

“This will ensure Cockburn Central is an active centre from the outset and will become the social and economic hub for the region.

“The project team paid careful attention to the design of internal streets, with the focus being on the town square adjacent to the station. Scale was also critical in the creation of a walkable town centre and one that could adapt with changing economic times and retail trends.”

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The design guidelines control critical elements such as built form and overshadowing without being overly prescriptive on issues such as height or use. Where required, attention to detail is encouraged, such as in the consideration of the amount of ground-floor glazing required, the depth of awnings and the location of entrances to street frontages.

Ms Smithson said meeting core sustainability objectives in all aspects of the design process was essential, this being a key corporate objective for LandCorp and the WA Government.

“LandCorp was extremely keen to adhere to and require high quality architecture and urban public spaces that set new sustainability benchmarks,” she said.

“We enthusiastically embraced that challenge, encouraging passive solar design, conservation of energy and water, recycling of building materials, rainwater harvesting and building robustness.”

LandCorp Senior Project Manager Barbara Gdowski said creating a new regional town centre was a complex process involving many government and community stakeholders.

“Cardno BSD has been an invaluable partner in helping turn the vision we had for Cockburn Central into a reality – the creation of a village that can grow into a town and ultimately a landmark for both the local community and the broader region,” she said.

Meeting core sustainability objectives in all aspects of the design process was essential.
People at Cardno

Mimi Doukas lights the way in Portland

WRG Design Planning Director Mimi Doukas has been recognised as one of her city’s leading young professionals following her selection in The Portland Business Journal’s 40 Under 40 for 2008.

The annual list honours the 40 most accomplished, influential and civic-minded executives under the age of 40 in Portland, Oregon, and a civic reception was held in the city in March to recognise the inductees.

“Being named in the ‘40 Under 40’ is an incredible honour for me and one that I am sure to look back fondly on in coming years,” Ms Doukas said.

“And while it is an individual award, there’s no doubt the excellent team we have at WRG Design Inc has played a key role in helping me get recognised by the business journal.”

At 37 years of age, Ms Doukas has built the 13-person Portland planning department into one of the industry’s most well-respected land use planning teams.

As Director of Planning, she is responsible for significant land use planning business developments for the region and helped propel the firm’s 27 per cent annual revenue growth in recent times.

She also oversees clients’ overall land use strategy, accounting for more than US$9.7 million in projects.

Ms Doukas is one of the US Northwest’s youngest women to serve as a Director of Land Use Planning and the only woman in the region to occupy this executive-level position.

Peter Knee relocates to the Solomon Islands

Cardno Acil’s Peter Knee is helping coordinate a $10 million recovery project.

Peter Knee and family in the Solomon Islands.

“Cardno is a dynamic organisation and I appreciate how much we can learn from other people around the world,” he said.

“The team has already undertaken a huge logistical effort to visit almost 50 sites across 10 islands in the far west of the country to assess and determine reconstruction designs.”

The recovery project includes the reconstruction and restoration of 30km of roads, 19 bridges, 35 culverts and crossings, five wharves and a jetty.

The project will assist the Solomon Islands Government to coordinate the reconstruction and rehabilitation of vital infrastructure and civil works.

Rebecca Haverkos wins the prestigious Truman Award

Emerging Markets Group’s (EMG) Rebecca Haverkos has been awarded the 2008 Truman Award, an honour that recognises the achievements of a young professional working in the field of international development.

Ms Haverkos, who is based in EMG’s Washington DC office, was presented with the award in March at The Society of International Development – Washington Chapter’s 2008 Conference.

The society presents the award each year to an 18 to 30-year-old who has spent at least one year in a development or development-related working environment and displayed the characteristics of leadership, creativity and dedication.

Ms Haverkos said she was honoured that the EMG Management Committee had nominated her for the award in recognition of her commitment to international development.

“I know that without the consistent support of my managers, Ken Smarzkin and Joe Lowther, and EMG’s willingness to challenge its young staff to excel, I certainly would not have received this award,” she said.

Ms Haverkos, who has been employed at EMG since January 2005, currently holds the position of Senior Development Specialist in the company’s Economic Growth Practice Unit.

In this role, she has been responsible for providing technical and project management support to USAID projects in Bosnia, Uganda, and the Ukraine, as well as technical support to the global Business Linkages Challenge Fund.

Richard Kell Scholarship winners

Cardno has named two of its most outstanding young engineers – Natalie Foley and Christian Forsyth – as joint recipients of the 2008 Cardno Richard Kell Scholarship.

The judging panel was unable to split the merits of Ms Foley and Mr Forsyth this year with both receiving the full prize including attendance at the 2008 RIDIC Conference in Quebec, Canada.

Ms Foley, who manages the 40-person Water Supply and Sewerage Business Unit at Cardno’s head office in Brisbane, said she was excited by the chance to represent the company at the upcoming RIDIC training program and conference.

“Cardno is a dynamic organisation and has provided me with a number of great opportunities. I am grateful for the exciting opportunity that winning this scholarship has given me,” she said.

Christian, who works in Cardno’s International Division and is based in the Maldives, said winning the scholarship would allow him to discuss the industry with engineering experts from other nations.

“I’ve been fortunate to work in several countries during my career and I appreciate how much we can learn from other people around the world,” he said.

The annual scholarship was developed to provide Cardno’s exceptional young engineers with the opportunity to participate in the prestigious year-long RIDIC (International Federation of Consulting Engineers) Young Professionals Management Training Program.

“Restoring the infrastructure and access to social services that underpins communities is our primary objective.”

A proactive participant in civic involvement, she is also actively involved in WRG’s Community Impact Crew, an internal, self-selected group of WRG employees who work together to make a difference in the local community.

Mimi Doukas of WRG Design.

Away from the office, Ms Haverkos displayed her passion for international development on her honeymoon last year when she volunteered as a teacher at the largest slum in sub-Saharan Africa.

Working with orphans at the New Adventure School in the Kibera slum of Nairobi, Kenya, she taught maths, English and sports and is now working to secure financial support for the school.

She is also a volunteer under a program supported by the International Rescue Committee that assists refugee families from Eritrea, Burundi, and Ethiopia to relocate to the United States.

Rebecca Haverkos working with orphans in Nairobi, Kenya.
News at Cardno

Cardno S.P.L.A.T. receives industry accolades

Cardno S.P.L.A.T. has received a double dose of praise from arguably the toughest critics the landscape architect firm has – its peers.

The Brisbane-based team was honoured at the 2007 Australian Institute of Landscape Architects Awards (Queensland division) for its work on two very different projects – the remodelling of an existing subtropical island resort landscape and the delivery of a definitive landscape vision for Brisbane Airport.

Cardno S.P.L.A.T. received a merit award in the design section for its work on Stradbroke Domain, a 2ha resort on North Stradbroke Island featuring 42 shacks and 40 villas, while the Brisbane Airport Landscape Masterplan was honoured with a merit award in the Planning category.

Cardno design stands the test of time

Cardno’s Landscape Architecture Discipline Leader Stephen Pate said receiving recognition from the landscape architecture peak body was a boost for both staff and clients.

“It’s very exciting as everyone can look at the work we’ve done and know it’s been honoured by our peers,” he said.

*Being judged by other landscape architects is the harshest criticism of all because everyone is searching for a competitive edge. It’s recognition for innovation, as well as quality.

“Peer recognition also goes a long way. There are benefits for staff in terms of morale and being involved in an award-winning office, while the two clients involved in those projects can stand proud with the work they’ve done and also have more faith in us as a leading consultant.”

Brisbane Airport Corporation Chief Executive Koen Rooijmans said his team was extremely pleased to learn the landscape masterplan had been honoured at the awards.

“We knew the Cardno S.P.L.A.T. team had produced a cohesive vision for the airport’s landscape and the award win adds further impetus to the masterplan they created,” he said.

Cardno S.P.L.A.T. will also contest the national division of the awards.

Cardno leads fight against water tank dangers

In Australia, Cardno is answering unprecedented demand from water tank manufacturers as Australia’s worsening drought increases certification requirements for the industry.

With governments offering various forms of rebates to encourage water tank purchases, manufacturers have been confronted with new structural code requirements for the tanks they produce.

This has led several of Australia’s biggest water tank manufacturers, including EGR Water and Team Poly, to commission Cardno’s finite element group to provide professional analysis on their tanks. This analysis includes investigating structural capacities and minimum wall thickness requirements.

Cardno Principal David Beneke said his team was responsible for analysing and certifying a significant percentage of the country’s water tank market.

“Cardno is leading the way in the design of above and below-ground tanks with the use of sophisticated finite element analysis technology,” he said.

“Our clients rely on Cardno to optimise the design of their polyethylene water tanks and we continually strive to maintain our high standards and technological advances.

“The primary concern with tanks that are not built to proper design standards is their walls can buckle or collapse. In some instances, tanks can even overturn when empty,” he said.

The lock consists of a rectangular concrete chamber with a pair of lock gates at each end, a system pioneered by Cardno with the Bribie Gardens lock in 1985.

“We’ve since gone on to design similar structures at Noosa Waters, Kawana Waters, Marsden Cove in New Zealand and, of course, Pelican Waters,” Mr Howard said.

Pelican Waters Sales Manager Geoffrey Coleman said the navigation lock and weir had been enthusiastically embraced by the community.

“Many people are attracted to Pelican Waters and because of Cardno’s expertise in delivering this unique system, it has provided waterfront residents with wide canals offering access to the Pumicestone Passage, as well as deep-water ocean access,” he said.

“The company has provided a valuable addition to Pelican Waters and one that is much appreciated by the community which lives here.”
Another record for Cardno
In February, Cardno announced its half year results including a 76.2 per cent increase in revenue for the half year to $195.8 million over the corresponding period in 2006.

Cardno Managing Director, Andrew Buckley, said business conditions for the Cardno group remained strong, with performance improvement based on organic growth as well as the successful integration acquisitions which Cardno made in the 2007 financial year.

“In the Australian, New Zealand, United Arab Emirates and International Development Assistance markets the demand for Cardno’s services remains strong. While there has been some softening in the domestic US residential market, strong performance elsewhere has once again enabled Cardno to improve its financial results,” said Mr Buckley.

Cardno has continued its acquisition strategy this financial year, acquiring Perth-based structural engineering company Bucklanded in September 2007, Brisbane headquartered Bowler Geotechnical in February 2008, and UK engineering software company Micro Drainage in March 2008.

“Cardno’s outlook remains strong and we have good prospects for expanding the business through organic growth and acquisitions both in Australia and internationally,” Mr Buckley said.

Recent acquisitions include:
- **Cardno Buckland – September 2007**
  Buckland Engineers is a structural engineering business and is an attractive partner for Cardno to consolidate its representation in Western Australia.
- **Cardno Bowler – February 2008**
  The acquisition of Bowler Geotechnical complements Cardno’s existing engineering and physical infrastructure services and will enable Cardno to expand its geotechnical environmental engineering and materials testing capabilities.
- **Micro Drainage – March 2008**
  The acquisition of Micro Drainage complements the operations of XP Software, Cardno’s long established Australian and US based water engineering software business.

Cardno’s global managers’ conference
Cardno showcased the company’s grassroots when it hosted managers from around the globe at its annual managers’ conference on the Sunshine Coast in March.

The Cardno Annual International Managers’ Conference saw 140 managers gather at the Hyatt Coolum for a three-day think tank, with about a quarter of the guests from international offices in the United Kingdom, Africa, Asia, New Zealand and the United States.

The conference was a chance for managers to discuss the company’s five-year strategic business plan and participate in a skills based trade show that allowed employees to get a better understanding of their colleagues areas of expertise.

Cardno Managing Director Andrew Buckley said hosting the conference on the Sunshine Coast was an opportunity for the company’s national and international managers to connect with the origins of the engineering enterprise.

“Cardno has grown in recent years to be a global leader in its field but we haven’t forgotten the early days when the company was first establishing itself on the Sunshine Coast and in Brisbane,” he said.

“Our Maroochydore office is one of the longest-standing in the company and Cardno has made a significant impact on the Sunshine Coast for almost 40 years.

“One of the major reasons for hosting our international conference on the Sunshine Coast is to allow our international team to see firsthand some of our benchmark projects, especially our expertise on urban waterway projects such as Twin Waters, Noosa Waters, Kawana Waters and Pelican Waters.”

Congratulations WRG Design
WRG Design’s Las Vegas division has snared a place in the record books after being named Engineering Firm of the Year for the third consecutive time at the 2008 NAIOP Spotlight Awards (Southern Nevada Chapter).

The awards, which are presented by the National Association of Industrial and Office Properties (NAIOP), honour individuals and companies for their excellence in development and contributions to the community.

The hat trick of wins for WRG Design is the first time in history that a firm has won the engineering award three years in a row.

WRG Design’s Las Vegas office Vice President Stu Hitchen said it was an honor to accept the award on behalf of his record-breaking team.

“It was a thrill to win an award such as this on one occasion but to do so three years running has exceeded even our own expectations,” he said.

“We are humbled by the recognition and are excited about the future development opportunities popping up across the region and beyond.”

Founded in 1967 and boasting more than 16,000 members, NAIOP is the United States’ leading trade association for developers, owners, investors, asset managers and other professionals in industrial, office and mixed-use commercial real estate.

Meanwhile, WRG Design’s Portland office has also received public recognition following its 12th place ranking in Oregon Business Magazine’s 2008 ‘100 Best Companies to Work for in Oregon’ list.

The annual list spans all industries and is based on the results of employee surveys and information provided by Human Resource departments.

“We have made the list for the previous three years and this is our highest ranking yet, having moved up from 32nd in 2006 and 16th last year,” WRG Design HR Director Tana Mallory said.

WRG Design has previously been recognised on similar lists in California and Arizona, while its Idaho office was recently ranked in the Top 5 on the ‘Best Companies to Work for’ in Idaho’s list.