



ETHERIDGE SHIRE COUNCIL
EVIDENCE OF THE PROJECT TEAMS'S EXPERIENCE & CAPACITY
“Construction of the Charleston Dam Facility”

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1 Executive summary

Etheridge Shire Council has been investigating the building of a dam which is to be located about six kilometres downstream of Forsyth and about 31 kilometres upstream of Georgetown on the Delaney River; principally for town water supply purposes. The dam is referred to as the Charleston Dam.

This document outlines Etheridge Shire Council's experience, capacity and capability to oversee the successful delivery of this project. It also provides evidence that the Council will engage the relevant skills and experience to ensure the project is delivered on time, on budget and to a high standard.

Despite being a small local government, Etheridge Shire Council has an excellent track record for innovation, project delivery and management of government grants. Our people are highly qualified and we have recent experience with similar-sized projects, with values of between \$15 million and \$20 million. Furthermore, we have won awards for the delivery of such projects.

Additionally, Etheridge Shire Council's project partner for the design of the Charleston Dam, Cardno, has excellent experience in designing and delivering dams and reservoirs.

Further information is detailed in this document.

2 Etheridge Shire Council

Etheridge Shire Council has an excellent track record for innovation, project delivery and the financial management of projects supported by government grants. Our people are highly qualified and we have recent experience with projects of a similar project value to the Charleston Dam.

2.1 Key personnel

Council has a group of highly qualified key personnel who have so far worked on the planning and initial stages of the Charleston Dam project. These staff will continue to provide their expertise into the future, ensuring the project is delivered successfully.

A few short bios are provided below:

- **Michael Kitzelmann, Chief Executive Officer** – Michael's career has included extensive service to the public sector, private sector and defence forces. After a 17 year career in the RAAF, Michael took up a position with the Queensland Department of the Premier and Cabinet in 2007 as Principal Consultant for Internal Audit and Risk Services (IARS). During his four years at IARS, Michael oversaw significant audits and reviews, including the review of ICT Network Security, Business Continuity and Disaster Recovery. Michael then worked for Ipswich City Council, for a property development company and for one of Australia's most respected business advisory and accounting firms. In 2014, Michael moved to North Queensland to become CEO of Etheridge Shire Council. Michael holds an MBA in Public Sector Executive Management is a Certified Information Systems Auditor and is Certified in Risk Management and Assurance.
- **David Munro, Deputy CEO and Director of Corporate and Community Services** – David has held Director positions within Queensland local governments for 12 years. Prior to this, David worked as a Senior Business Banking Manager with the National Australia Bank Ltd for 14 years. David holds a range of qualifications including a Bachelor of Banking & Finance, a Bachelor of Human Resources, Diploma in Local Government, and Diploma of Planning (current). David is currently President of the Local Government Finance Professionals Queensland and is a Member of Local Government Managers Australia.
- **Rohana Samarasekera, Director of Engineering** – Rohana has been the Director of Engineering at Etheridge Shire Council since 2012. Prior to that he held the same position within Charters Towers Regional Council for 6 years. He commenced his professional career in Sydney, working with Wargon Chapman and Associates and then for the Sydney Water Sewerage and Drainage Board. Rohana holds a Bachelor of Science Engineering, Master of Science Engineering (Structures), Master of Science Engineering (Public Health) and Certificate in Contract Engineering. He is a Registered Professional Engineer of Queensland (RPEQ) and a Member of the Institute of Engineers Australia (MIEA).

Our staff have been awarded for their innovation and excellence. Our team will bring this same level of dedication and innovative thinking to the oversight of the Charleston Dam project.

For example, Etheridge Shire Council's Information Technology Officer, Terry Walsh, was the brains behind a fully portable communications system that fits in the back of a vehicle (utility/truck) and provides Council staff with 'remote' access to the Internet, emails and Council's internal network. Mr Walsh built the Portable Satellite Communications Unit (PSCU) in his backyard, after the issues of remote communications was raised by the Shire Engineer. The technology solution has resolved connectivity issues experienced at remote worksites across Council's 39,000 square kilometre area. In recognition of his ingenuity, Mr Walsh won the Innovation Category at the Local Government Manager's Association (LGMA) Queensland Awards in April 2013.

2.2 Experience and awards

Etheridge Shire Council has a strong track record administering government grants and delivering infrastructure projects. A few examples are provided below:

Example 1: The Einasleigh River Bridge

In 2009 Etheridge Shire Council secured \$18 million in Commonwealth funding from the Department of Infrastructure, Transport, Regional Development and Local Government through the *Community Infrastructure Program: Strategic Projects 2008-09* to flood-proof the Einasleigh River Bridge.

The upgrade to the bridge was required to allow for all-weather access to enable the movement of goods and services to the Gulf communities all year round, as the old bridge regularly flooded during the monsoon season.

Council's role in the project was as Project Manager. Etheridge Shire Council managed the project's budget and, in the end, delivered the \$18 million project under budget, for just over \$14 million.

The new Einasleigh River Bridge was built as a two-lane concrete structure with rock protected embankment road approaches joining into the existing Gulf Developmental Road. A large cost saving was achieved through the innovative use of pre-cast concrete elements, to reduce on-site works in this remote area. Delivery of fresh concrete to the site involved a five hour round trip from the nearest supplier and technical hurdles had to be overcome with the help of Main Roads to ensure the concrete was delivered in a useable condition.

There were several unique aspects to the project:

- The collaborative method by which Etheridge Shire Council obtained funding, by first seeking the support of all neighbouring shires and communities and then by proving the project was not simply delivering road infrastructure but was helping to combat the vulnerability faced by Gulf communities; and
- The project was recognised as one of the first projects to connect all tiers of government, working collaboratively together. The Einasleigh River Bridge is a State Government asset, for which funding was provided by the Commonwealth, and Etheridge Shire Council managed project delivery and the budget, and secured, managed and acquitted grant funding.

Council was recognised for project excellence at the *National Awards for Local Government* in 2010, winning the Infrastructure Development Award (small council category). As a council of just 584 rateable properties, Etheridge Shire Council won this award over much larger councils from across Australia, of up to 15,000 rateable properties.

Example 2: The Savannah Way upgrade

In 2007 Etheridge Shire secured and administered \$10 million in Commonwealth funding for the widening of the Savannah Way. The funds were granted by the Department of Infrastructure, Transport, Regional Development and Local Government's North West Roads Branch. The total project cost was \$19.42 million.

The Savannah Way, otherwise known as the Gulf Developmental Road, is the main east-west road linking Queensland's Gulf Country. It begins in Etheridge Shire and stretches westward through Croydon, Burketown, Doomadgee and across the Northern Territory into Western Australia. The Savannah Way is the main arterial road, vitally important for the transport of goods and services and for the transport of tourists (many travelling with caravans and camper trailers), throughout the region.

The project involved widening and sealing a number of substandard sections of the Savannah Way between Mount Garnet and Burketown, including a 56 kilometre stretch between Mount Garnet and Mount Surprise (leading into the Etheridge Shire) and a 9.2 kilometre stretch from Mount Surprise to Georgetown (in Etheridge Shire).

The project was delivered on time and on budget.

2.3 Capacity

As a small council, Etheridge Shire recognises our capacity limitations when it comes to the design and construction of a project the size and complexity of the Charleston Dam. Council's works department alone could not deliver this project.

For this reason we have engaged a reputable private contractor, Cardno, to design the Dam. Council along with local contractors will construct the Dam with Cardno providing the Project Management oversight for the construction of the Dam.

Council does, however, have the capacity to manage a project of this size, as demonstrated through the delivery of the Einasleigh River Bridge project. Council will work in partnership with our contractor to manage certain aspects of the project, while engaging the contractor to manage aspects that fall outside our capacity and/or scope of expertise.

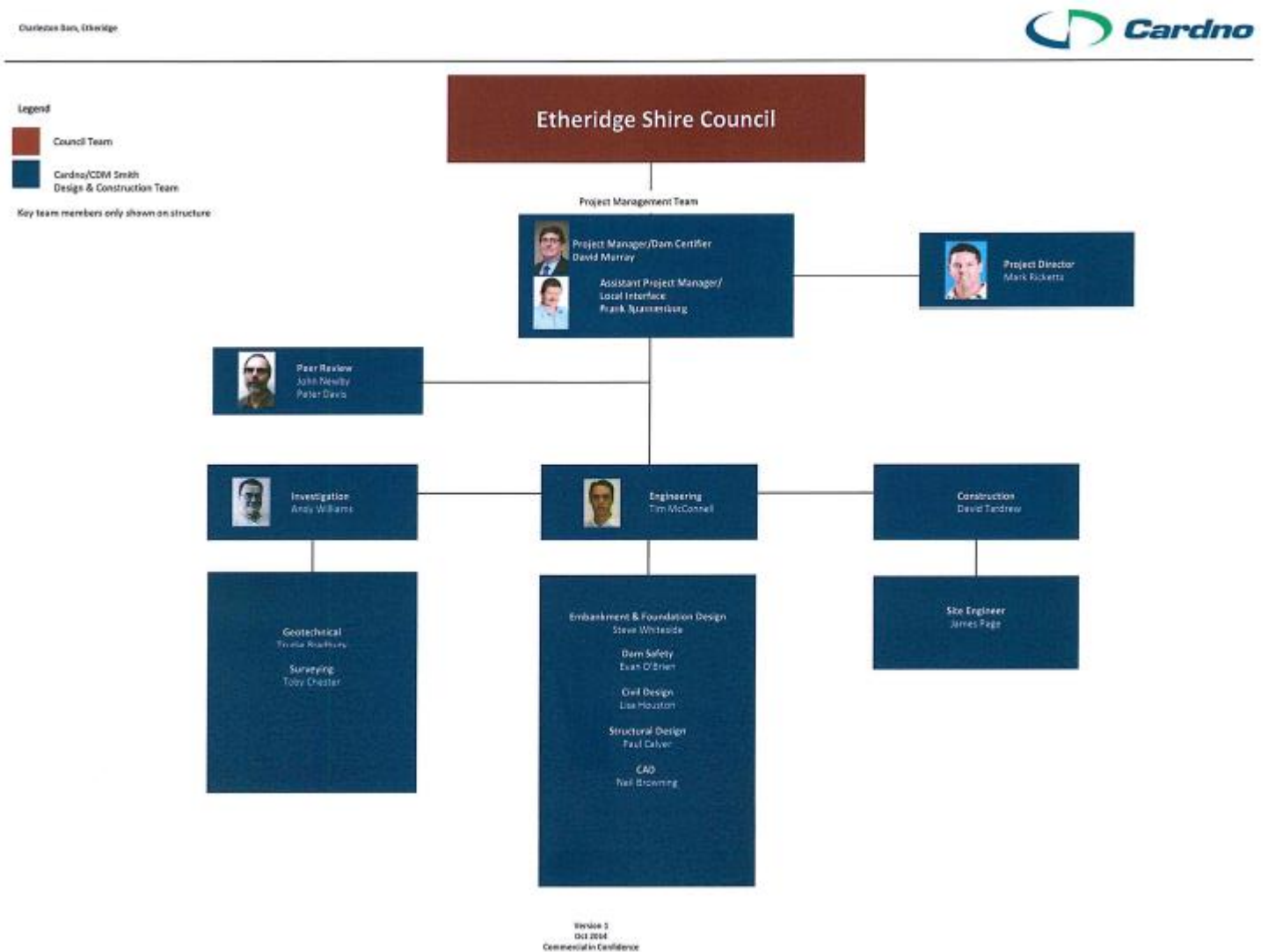
The next section provides further information on Cardno's experience and capacity.

3 Cardno

Cardno is an ASX-listed professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world.

The Cardno team is comprised of leading professionals who plan, design, manage and deliver sustainable projects and community programs across ten market sectors. One key market sector is 'water', which includes dams and reservoirs.

3.1 Key personnel



3.2 Experience and awards

Cardno has a strong track record designing and constructing dams and reservoirs. A couple of examples are provided below:

Dam	Description	Role
Wivenhoe Dam	Earth and rockfill dam with gated spillway on the Brisbane River. Provides potable water supply and flood mitigation for Brisbane.	Supervision of the foundation grouting
Boondooma Dam	Concrete face rockfill dam constructed on the Boyne River. It was primarily built to provide water supplies to the Tarong Power Station. It also provides limited water for irrigation purposes.	Detailed design of the diversion tunnel.
Awoonga Dam	Concrete face rockfill dam constructed on the Boyne River South West of Gladstone and is the sole water supply for the Gladstone Area Water Board.	Site engineer and second in charge to the Resident Engineer supervising the construction by contract.
Burdekin Falls Dam Burdekin Falls Saddle Dam	Mass concrete dam and earth and rockfill saddle dams constructed on the Burdekin River to provide irrigation water for the Burdekin Irrigation Area near Ayr.	Hydraulic design of the spillway and innate and outlet works. Second in charge then Resident Engineer supervising the construction of the works by contract.
Bjelke Petersen Dam	Earth and rockfill dam with concrete spillway constructed on Barker Creek near Cherbourg primarily to provide water for irrigation purposes.	Resident Engineer supervising the construction by contract.
Peter Faust Dam	Earth and rockfill dam constructed on the Proserpine River.	Project Director overseeing the construction.
Kroombit Dam	A roller compacted concrete dam, built to replenish the groundwater supply to the Callide Irrigation area	Project Director overseeing the construction.
Teemburra Dam	Concrete face rockfill dam with an unlined spillway constructed to provide water for town water supply and irrigation purposes.	Set up the first relationship contracting arrangement for a dam construction in Australia.
Borumba Dam	A concrete face rockfill dam with concrete spillway constructed on Yabba Creek for irrigation and potable water supply.	Direct management of the workforce constructing the Stage 2 raising of the dam.
Lenthalls Dam	Earth and rockfill dam with concrete spillway constructed on Burrum River to provide potable water supply to the Hervey Bay region.	Project Manager developing the preliminary design for the raising of the dam.
Paradise Dam	Roller compacted concrete dam constructed on the Burnett River primarily for irrigation purposes.	Technical advisor to the client, Burnet Water Pty Ltd, during competitive design and construction procurement process.
Wyaralong Dam	Roller compacted concrete dam constructed on the Teviott Brook as a water source for SEQ's water grid.	Manage the hydrologic and hydraulic studies; Oversight the geotechnical investigations and development of preliminary design; Chairman of Expert Review Panel; and Verification Manager.

3.3 Capacity

Cardno & Davies was founded in Brisbane Australia in 1945. Two entrepreneurial engineers, Gerry Cardno and Harold Davies, recognised the huge potential growth in post-World War II Australia.

Cardno's continuing success is largely attributable to the provision of diverse and complementary services, a strong emphasis on exceptional client service and a growth strategy which positions us to make the most of strategic markets that deliver new services and accelerate organic growth.

Over the last 15 years, the company has acquired more than 45 other firms, enhancing its capabilities and capacity. In 2002, while on course for global expansion, the company became 'Cardno'.

Cardno is still headquartered in Brisbane, employing around 6,500 staff, with an annual turnover of \$1.4 billion.

A team of 15 staff, based in Brisbane and Far North Queensland, have been working on the design for the Charleston Dam.