



DARWIN PRECAST PRODUCTS: PIONEERING INDIGENOUS EMPOWERMENT

Ironbark Aboriginal Corporation, a leading community development organisation in Northern Territory's Darwin-Daly Region, acquired Darwin Precast Products in 2023 to support its purpose of creating sustainable job opportunities for Indigenous people. The acquisition has added to the not-for-profit's mission to enhance lives and transform communities by merging contemporary industry practices with Indigenous employment programmes.

EMPOWERING COMMUNITIES THROUGH INDUSTRY INTEGRATION

Established in June 2000, Ironbark Aboriginal Corporation makes a significant contribution to its local community, operating across urban, regional and remote areas as it improves Indigenous peoples' purpose and participation.

With an annual turnover of over \$20 million, Ironbark has pioneered initiatives that connect communities, preserve cultural heritage and foster economic independence by creating meaningful employment opportunities.

TRANSFORMATIVE IMPACT OF DARWIN PRECAST PRODUCTS

The integration of Darwin Precast Products into Ironbark's portfolio has proven pivotal in advancing these goals. By merging modern industry practices with opportunities for Indigenous employment strategies at the precast factory, Ironbark has not only strengthened its workforce but also created a means of developing community skills, something that is crucial for long-term community prosperity.

According to Shaun Pearce, the CEO of Ironbark Aboriginal Corporation, incorporating a precast concrete manufacturing business into the fold aligns perfectly with the organisation's objective of establishing long-standing employment opportunities for Indigenous people.

Mr Pearce notes that the acquisition has led to many stable job opportunities, which is having a big impact on their economic independence and overall well-being.

He also explains that acquiring Darwin Precast has involved connecting with the national industry body for precast concrete, National Precast Concrete Association. This move was to ensure the business remains up-to-date with the latest industry developments and standards, while being able to network with other precast business operators from around the country.

"Since joining in February 2023, we have already been to one national conference, which we found invaluable", Mr Pearce says.

"As well, we made some fantastic contacts with whom we have liaised about some upcoming projects, since the conference."

"It's great to have access to a network of people who do what we do but don't compete with us", Mr Pearce says.

National Precast CEO Sarah Bachmann welcomes the company's involvement.

"Darwin Precast Products is in a unique position and is achieving impressive results. It's fantastic to see a precast business making a difference in the local Indigenous workforce, and really improving peoples' lives," Ms Bachmann says.

FOSTERING SKILLS AND SUSTAINABLE GROWTH

Running Darwin Precast Products has enabled Ironbark to offer skilled trade positions in the precast concrete manufacturing sector. This initiative not only provides stable employment but also has a flow-on benefit in that it equips individuals with valuable experience and skills, and as a result enhancing their prospects in the broader construction industry. The expertise gained through these roles is transferable, ensuring long-term benefits beyond immediate job placements.

Ironbark's Community Development Programme (CDP), which supports over 1,100 job seekers across 12 locations in the Darwin-Daly Region, has been strengthened by the integration of Darwin Precast Products.

Mr Pearce notes that the expansion has added to the organisation's efforts by creating new opportunities for employment and skills training.

"Participants are involved in diverse activities, receive mentorship and are trained in both specific job skills and broader life skills, ensuring they receive a well-rounded development," he adds.

BALANCING TRADITION WITH ECONOMIC PROGRESS

Ironbark Aboriginal Corporation remains steadfast in its commitment to preserving cultural heritage while driving economic growth. Darwin Precast Products exemplifies this balance, demonstrating how modern business practices can harmonise with cultural values, to safeguard community well-being.

Through ongoing community engagement and feedback, Ironbark ensures that its employment initiatives foster a supportive environment that is conducive to its employees' personal and communal growth.

CELEBRATING ACHIEVEMENTS, INSPIRING FUTURES

The success stories emerging from Darwin Precast Products resonate deeply with Ironbark's ethos of transformative change. Ironbark's slogan, "Changing lives - one story at a time", encapsulates the essence of their mission, highlighting their dedication to advocating for Indigenous opportunity and fostering inclusive development programmes.

A VISIONARY FUTURE

Ironbark Aboriginal Corporation's acquisition of Darwin Precast Products represents more than a business strategy; it embodies a commitment to reshaping lives and communities across the Northern Territory. By nurturing sustainable employment and skills development, Ironbark pioneers a path where business success aligns with social responsibility, creating a model for inclusive growth and prosperity.



COMPLETE

PRECAST TECHNOLOGY

WORLDWIDE

-
- Highly automated and customized carousel plants
 - Reinforcement machinery and mesh welding plants
 - Mould systems for precast concrete elements
 - Slipformer, extruder, hollow core production machinery
 - In-house precast plant and sustainable building system
 - Software solutions for all process steps (CAD, ERP, MES)
-



PRESERVING HISTORICAL AUTHENTICITY WITH PRECAST SOLUTIONS

Project: Sovereign Hill Museum Association

Precaster: Sunset Sleepers

Project Location: Ballarat, VIC

Ballarat in Victoria is probably most well-known for 'Sovereign Hill', one of the state's premier tourist attractions that vividly brings the 1850's gold rush era to life.

Covering 15 hectares on a former gold mining site and run by the Sovereign Hill Museum Association, the outdoor living museum comes complete with a living township, featuring diggings, underground mines, costumed characters and coach rides, as well as shops, trades, schools, and dwelling. Offering a series of experiences, it's an immersive experience into Australia's historical past.

Tasked with enhancing the Museum's infrastructure, the Association embarked on a project aimed at improving durability using precast concrete, all while preserving the site's historical appearance and ensuring accessibility for all visitors.

INFRASTRUCTURE UPGRADES TO IMPROVE DURABILITY AND ACCESS FOR ALL

In keeping with the era's aesthetics, the museum had typically used timber for its retaining walls. While timber was originally chosen for its availability and workability, it necessitated frequent maintenance and replacement over time. As well, existing infrastructure did not provide access to the gold panning experience for visitors with mobility impairments.

INNOVATIVE PRESERVATION SOLUTION

The scope of works to overcome the challenges included devising a more durable solution for the museum's retaining walls and constructing a new accessible platform.

The solutions: a concealed, sustainable and robust precast concrete retaining wall system,

covered with timber to preserve the museum's authentic gold rush era appearance, plus the construction of a new platform. Requiring construction of additional retaining walls, the platform would facilitate wheelchair access to a new all-ability gold panning area.

National Precast member Sunset Sleepers was entrusted with manufacturing the much needed sleepers for the project.

Known for their reliability and expertise, Sunset Sleepers' commitment to quality, sustainability and innovation positions them as a leader in the concrete sleeper market, providing clever solutions for a wide range of construction projects.



According to Sunset Sleepers Director Miguel Donnenfeld, 800 custom-designed reinforced concrete sleepers were custom-manufactured, tailored to specific engineering requirements. R6 rebar was specified in the project drawings, to enhance durability and prevent shear failure. By distributing stresses more evenly throughout the sleepers, the reinforcement would also control shrinkage and potential cracking during construction.

National Precast CEO Sarah Bachmann says that replacing outdated timber retaining walls with modern, durable materials that are concealed to preserve historical authenticity, is an ingenious solution for one of Victoria's renowned tourist attractions.

"With fond memories of having visited the museum as a child, it's pleasing to see one of our members making a contribution to such a worthwhile project," Bachmann comments.

"Through meticulous planning and execution, Sunset Sleepers have effectively enhanced this iconic museum, ensuring its infrastructure meets contemporary standards and accessibility requirements, while preserving its historical charm," she adds.

SEAMLESS INTEGRATION

Despite being a busy tourist attraction with on average 2,500 visitors each day, the integration of the museum's new infrastructure was seamlessly managed, to minimise disruption. Sunset Sleepers coordinated its manufacturing and installation to align precisely with the museum's operational needs, ensuring a smooth process from start to finish.

SOVEREIGN HILL MUSEUM: A CULTURAL AND ECONOMIC HUB

Sovereign Hill Museum, situated in Ballarat, Victoria, is a prominent living museum that adds \$260 million annually to the local economy.

Attracting hundreds of thousands of visitors annually, it serves as a cornerstone of tourism, generating employment opportunities and bolstering local businesses.

The museum's funding primarily originates from the Australian Federal Government's National Tourism Icons Program, philanthropic contributions and investments from the private sector.

Managed by the Sovereign Hill Museum Association, a non-profit organisation, its mission is to conserve and showcase the history of the Australian gold rushes, providing visitors with a culturally enriching and educational experience.

Powering a Sustainable Future

informit

Did you know you can access the latest issue of *Construction Engineering Australia* via Informit?

The Informit Engineering Collection is an ever expanding resource covering aspects of municipal engineering – urban management and planning, civil engineering and construction, environmental management, planning issues and traffic management. The database offers an extensive variety of resources including journals, trade publications, reports and conference proceedings.

The Collection guarantees quality through partnerships with peak professional bodies including Engineers Australia and the Institution of Professional Engineers New Zealand, as well as Content Providers including EPC Media Group.

The Informit Engineering Collection delivers hard to find content designed to complete and complement all your construction engineering requirements.

Other key titles published by EPC Media include:

Highway Engineering Australia

Waste + Water Management Australia

Request a quote
or free trial via
www.informit.org/trial-and-quote



informit

Research for your
global future





HOW PRECAST CONCRETE IS SHAPING AUSTRALIAN INFRASTRUCTURE

Australia's largest road infrastructure project, WestConnex, is transforming the way Sydney commuters navigate the busy city and its surrounds. The WestConnex M8 is a 9-kilometre stretch from Kingsgrove to St Peters, which not only eases congestion but also sets a new benchmark for modern infrastructure design. A key element contributing to the success of this monumental development is precast concrete, playing a vital role in ensuring both safety and aesthetic appeal.

PAVING THE WAY FOR A FUTURE-READY SYDNEY

As the second phase of the WestConnex motorway network, the M8 is designed to reduce commute times by up to 30 minutes. It features two lanes in each direction, with provisions to expand to three, and connects seamlessly to key infrastructure projects like the M4-M5 Link Tunnels and Sydney Gateway.

While the M8 is notable for its scale and functionality, what truly sets it apart is its forward-thinking design. The incorporation of precast concrete elements future-proof the motorway, ensuring it remains functional and visually striking for decades to come. Renowned for its strength, durability and versatility, precast is an ideal material for such a large-scale infrastructure project.

BLENDING FUNCTIONALITY AND AESTHETICS WITH PRECAST

As a National Precast member, Ozcast played a crucial role in the success of the M8. Supplying vital precast concrete components, the company's commitment to delivering high-quality precast solutions extends beyond functionality.

With experience in infrastructure, rail and commercial projects, the company ensures that every product not only met the highest quality standards, but also elevated the motorway's aesthetic appeal.

The manufacture and installation of 106 precast parapets to serve as essential safety barriers and over 2,000 architecturally-finished panels for retaining walls, exemplifies how the company is contributing to balance safety and structural integrity with visual appeal.

CONSTRUCTION CHALLENGES OVERCOME

A major challenge of the WestConnex M8 project was the need to install components over live roads. Originally intended to be cast in-situ, the decision to switch to precast concrete significantly improved efficiency while minimising disruption to Sydney's busy traffic. Ozcast's flexibility and ability to adapt to the project's complex logistical requirements ensured a speedy, safe and smooth result.

INNOVATION IN ACTION

Ozcast's contribution to the M8 project showcases how innovative precast concrete solutions can drive large infrastructure projects forward. By embracing advanced manufacturing techniques, the company was able to deliver precision-engineered components on time, ensuring that the project met its tight deadlines without compromising safety standards.

The success of the WestConnex M8 underscores the importance of precast concrete in Australia's infrastructure future. From ensuring road safety to elevating aesthetic standards, precast concrete proves to be a cornerstone of modern construction, offering strength, durability, efficiency and beauty.

BUILDING AUSTRALIA'S FUTURE WITH PRECAST CONCRETE

As Australia's infrastructure continues to evolve, precast concrete will play a central role in delivering high-quality, sustainable solutions. The WestConnex M8 is a testament to the immense potential of this technology in shaping the country's roads, bridges and buildings.

Ozcast's involvement in this landmark project highlights the expertise and innovation that National Precast members bring to the construction industry. With a commitment to excellence, safety and sustainability, precast concrete manufacturers like Ozcast are helping to build a stronger, more connected Australia - one project at a time.

INNOVATION AND EXCELLENCE: OZCAST EXEMPLIFIES NATIONAL PRECAST MEMBERSHIP STANDARDS

National Precast CEO Sarah Bachmann says precast manufacturer Ozcast is typical of the Association's membership, as it strives for continuous improvement in providing high-quality precast solutions that not only ensure structural integrity, but also enhance the aesthetic appeal of infrastructure projects.

"As Association members, companies like Ozcast are plugged into the latest industry trends, safety protocols and technical innovations. With a strong commitment to corporate social responsibility (CSR), they integrate sustainable practices and advanced manufacturing techniques into their operations, contributing to both the industry's growth and the well-being of the community," says Ms Bachmann.

"We are proud to have Ozcast as a member of National Precast. Their commitment to quality and innovative solutions strengthens Australia's infrastructure sector and showcases the true potential of precast concrete," Ms Bachmann says.