



SEAFORD RAIL EXTENSION

THE PERFECT PARTNERSHIP

The new railway will provide a 5.7 kilometre extension of the dual track rail line from Noarlunga Centre Railway Station to the Seaford District Centre.

SEAFORD RAIL EXTENSION / THIESS & MCCONNELL DOWELL



Left The Seaford Rail Extension project under construction.

The significant \$291.2 million design and construction of the Seaford Rail Extension Project in South Australia is a joint venture between two of Australia's most renowned construction companies, Thiess and McConnell Dowell.

The new railway will provide a 5.7 kilometre extension of the dual track rail line from Noarlunga to Seaford and will include stations and Park and Ride facilities at Seaford Meadows and Seaford, a bus interchange at Seaford, 1.2 kilometre elevated rail bridge over the Onkaparinga Valley, rail bridge over Old Honeypot Road and road bridges over the rail line at Goldsmith Drive, Seaford Road and Lynton Terrace.

Established more than 75 years ago, Thiess have amassed an enormous breadth of experience, capabilities, skills and resources and are able to deliver to a diverse clientele that spans Australia's urban and regional centres, as well as New Zealand, Indonesia and India.

Given their commitment to building vital infrastructure and providing essential community services, as well as consistently delivering innovative and sustainable outcomes, Thiess have worked on a number of significant projects. Some of these include Tulla Sydney Alliance- M80 Ring Road Upgrade, the iconic Eastlink road project and the West Gate Freeway Alliance Project. Thiess have also recently been awarded the major section of the Regional Rail Link in Melbourne.

Formed in 1961, McConnell Dowell is a major engineering, construction, building and maintenance contractor delivering infrastructure to the building, mining, oil & gas, power, petrochemical, social & public infrastructure, transport and water sectors.

The Group has a broad construction offering with complete multi-discipline capability in building, civil, fabrication, electrical and mechanical works and are engineering and construction specialists in pipeline, tunnelling, marine and rail construction and employs approximately 8,000 personnel throughout Australia, Asia, New Zealand, the Pacific and the Middle East.

A selection of McConnell Dowell's current portfolio of transport projects in Australia includes the Gold Coast Light Rail PPP, Melbourne Airport APAC Drive On-Ramp, Solomon Rail Hub, Breakwater Bridge. McConnell Dowell is also currently executing New Zealand's largest transport contract, Waterview Tunnel and the Beauty World Station and Tunnels Project in Singapore.

With a culture that is founded on innovation and collaboration and a large transport CV, McConnell Dowell was the perfect Joint Venture partner to collaborate with on the Seaford Rail Extension.

With project completion expected by the end of 2012, Thiess and McConnell Dowell have together, adopted a creative and innovative approach to the construction of the significant rail and associated facilities. With a team of more than 300 highly-skilled and professional employees involved onsite, a diverse range of products have been used throughout the construction process. A particular feature of the project is the use of incremental launching to construct the 1.2km elevated rail bridge. This method was chosen to minimise the construction footprint of the bridge and reduce environmental impacts on the surrounding Onkaparinga River and Recreation Park during construction.

This leading technique involves sections of the viaduct being cast in a separate area and then 'pushed' out over the Onkaparinga Valley to eventually meet in the middle and form a bridge.

Upon project completion, this unusual viaduct will be one of the longest, incrementally launched bridges in Australia and further showcases the cutting-edge and refreshing approaches adopted by both Thiess and McConnell Dowell.

The dedicated and professional Joint Venture team have used their building and management expertise to overcome this challenges faced on this Project and as a result, Thiess and McConnell Dowell have been able to deliver competitive results, in both a cost and time effective manner.

With the Seaford Rail Extension project supported by their multi-disciplinary teams and infrastructure specialists, Thiess and McConnell Dowell have continued to set new industry standards and exceed client expectations. In addition, as both companies are focused on delivering performance, safety and integrity, to any project, sustainable and environmental outcomes are consistently delivered.

Having completed a broad range of civil projects, including vital transport networks, water and resources infrastructure, Thiess and McConnell Dowell believe that every construction project, no matter how large or small, is an exciting opportunity to not only support local communities, but to also advance the industry and provide the best possible outcomes for the client.

For more information contact Thiess, Level 2, 101 Flinders Street Adelaide SA 5000, phone 08 8274 5200, fax 08 8274 5231, website: www.thiess.com.au

For more information contact McConnell Dowell, 100 Hutt Street Adelaide SA 5000, phone 08 8100 8088, fax 08 8232 1883, website: www.macdow.com.au

In August this year, Freeway Concrete Constructions will complete its significant part in a major Australian infrastructure project. The \$291m Seaford Rail Extension is a 5.7km dual-track project extending the Adelaide rail route to the Noarlunga line.

Freeway Concrete Constructions commenced work in June 2011 with Jack Bridges and Craig Simeon supervising the contract, which included construction of road bridges at Seaford Road, Lynton Terrace and Old Honeypot Road, as well as viaduct foundations and all concrete works at the new Seaford and Seaford Meadows Stations, such as their platform walls, slabs, lift shafts, pedestrian ramps and overpass bridges and works for a number of buildings.

The task for the bridges and viaduct involved 430 prefabricated panels, produced onsite and moved into position. The 1.2km viaduct over the Onkaparinga River Valley is one of few in the world with a continuous span of more than one kilometre and it will become South Australia's longest railway bridge. It consists of 21 piers and 48 segments and required 2250 tonnes of steel reinforcement and

10,300 cubic metres of concrete. Its design specifications require a lifespan of 150 years.

The Seaford rail extension will provide more efficient transport for Adelaide's projected population increase to 2025 of a further 9,000 residents in the area.

Other projects underway by Freeway Concrete Constructions are the Adelaide Desalination Plant and Adelaide Living Beaches, sand pumping stations. The company provided services to a number of other South Australian projects, recently completing works on the Glenelg Tram Overpass, the Blakewell Underpass, the Common User Facility at Techport, the Glenelg and the Aldinga Water Treatment Plants. In Victoria, their recently completed projects are the Echuca Water Treatment Plant and the Port Melbourne Port upgrade; in Tasmania the Meander Dam and in Queensland, the Kogan Creek Power Station.

For more information contact Freeway Concrete Constructions, PO Box 560 Moama NSW 2731, phone Jack Bridges 0418 307 634.



Below Total Asbestos Services were responsible for asbestos removal works on the Seaford Rail Extension.

Below Fleurieu Cranes supplied their 350 tonne All Terrain crane to lift head stocks for the viaduct.



Total Asbestos Services, a holder of an unlimited asbestos licence that enables them to manage and remove both friable and non-friable asbestos, was established as an incorporated company in 1998. Being ABN and Workcover registered, Total Asbestos Services have qualified for Government pre-qualification to 4MA level, and operate with \$60 million Public/Products/Asbestos Liability insurances. In addition, the company is EPA licenced to transport asbestos, is the holder of a restricted builders licence and is DTEI Code Compliant.

Given the fact they have EPA registered trucks and fully equipped utilities, Total Asbestos Services is in the position to undertake state-wide asbestos removal works, both friable and non-friable. Given their prolific qualifications, Total Asbestos Services have delivered a range of services in the removal and management of asbestos and asbestos-related issues within the commercial, civil and domestic market, including all Correctional Services facilities and police stations within South Australia and more recently on the Seaford Rail Extension project. Some of this work specifically included the building demolition and reinstatement works, which were carried out after the complete removal of the asbestos. Other work provided by Total Asbestos Services was the compilation of asbestos registers, domestic residence inspections for asbestos content, sample analysis for identifying asbestos content and general consultation with the

client in regards to any asbestos issues associated with the project. Total Asbestos Services provide a comfortable, safe and stress-free experience within an asbestos environment. In addition, to help protect the public, air monitoring and post removal clearance inspection is conducted on all jobs by an independent air monitoring company, regardless of its' size or scope. As these results are then made available to their clients within a couple of hours it helps allay any fears that staff or the public may have and also complies with Safework SA, Spotless and DPII regulations.

However, the commitment to the asbestos industry doesn't stop there. Managing Director and licence holder of Total Asbestos Services, Wendy Tredinnick, is also involved in promoting public awareness and education in the safe management and handling of asbestos. This includes holding Asbestos Awareness sessions to Council employees and providing information, education and awareness about the associated risks. Part of this education process also includes being a member of the significant SA Asbestos Coalition that deals with Government bodies to provide ways of educating the public.

For more information contact Total Asbestos Services, 15 William Street Mile End, Adelaide SA 5031, phone 08 8234 1282, website: www.totalasbestos.com.au.

Established in 2005 by Philip Allen and two business partners, Fleurieu Cranes is an Adelaide based company that specialises in mobile crane and labour hire to an extensive range of clients within the building, construction, industrial and commercial industries. With their modern fleet and highly skilled team of operators, Fleurieu Cranes offers a variety of services including general rigging and boilermaker services, pre-cast and tilt-up panel installations, a 24/7 mobile crane hire service as well as steel fabrication and erection services.

Given their breadth of industry expertise and know-how, Fleurieu Cranes have been involved in a range of prolific projects such as Adelaide Film & Screen Centre, Burnside Village, Southern Expressway, Women's & Children's Hospital, Desalination Plant, Waste Water Treatment Plants, Christies Beach & Aldinga, Rail Car Depot Relocation and the Adelaide Entertainment Centre. Of the newest projects around Adelaide, Fleurieu Cranes is involved in the construction of Tagara's Light Square (Project 76), Hansen Yuncken's Rundle Place Project on the old Harris Scarfe site, the New Royal Adelaide Hospital and the Seaford Rail Extension.

This time-saving new dual track rail line, from Noarlunga Centre to Seaford, incorporates 5.7 kilometres of electrified dual track broad gauge rail, two stations, park and ride facilities at Seaford Meadows, an elevated bridge over

the Onkaparinga Valley and a rail overpass at Old Honeypot Road. Whilst working on the Seaford Rail Project, Fleurieu Cranes supplied their 350 tonne All Terrain crane to lift head stocks for the viaduct. They also carried out a number of general lifts using their Frannas and All Terrain Cranes (which ranged in size from 15 to 200 tonnes) to load semi-trailers, unload reo from trucks, re-locate portable buildings and concrete barriers and erect panels.

Through a combination of their modern fleet and a commitment to upholding optimum workplace safety and efficiency, the highly-skilled team from Fleurieu Cranes fulfilled their project responsibilities in both a timely and cost effective manner.

In fact, given their dedication to meeting all of the specific requirements of the Seaford Rail Extension Project, Fleurieu Cranes once again demonstrates their professionalism and reliability as one of Adelaide's leading mobile crane and labour providers, delivering outstanding project results and complete customer satisfaction every time.

For more information contact Fleurieu Cranes Pty Ltd, 7-9 Lafitte Road Wingfield SA 5013, phone 08 8260 5122, admin fax 08 8260 7900, crane office fax 08 8260 5922, email: service@fleurieucranes.com.au, website: www.fleurieucranes.com.au

Below The team of Corporate Clean working on the Seaford Rail Link Project.



water to settle into the microscopic holes of the vinyl and build up on the surface to form a hard layer of dirt, which can only be removed with specialised equipment & chemicals. This is quite evident when looking at the surface into a backlit area and appears as a dark haze on the surface.

As a result of the work at the Adelaide Desalination Plant CCPS has developed a specialised cleaning process specifically designed for maintaining project construction sites. Small agile auto scrubber's which scrub, rinse and squeegee the floor surface are essential to remove harsh dirt from the surface and provide a continued supply of clean water during the process, simply mopping the floor will not achieve the same outcomes. A regular routine process using a special formulated maintenance chemical in conjunction with high speed polishing machines help bring the surface up to a good condition, these processes must be carried out frequently to maintain the floor condition.

The outer areas of the site must also be maintained with a superior matting system and regular high pressure cleans of breezeways, buildings and walkways which all help keep a clean environment. As part of our cleaning program we allow for detail cleaning each week, often on the Saturday when skeleton shifts are rostered on. This additional time is used to detail sills, maintain air conditioning units, scrub & detail toilet areas and apply a sanitation program ensuring that light switches, door handles, Phones, are bacteria free. CCPS can also supply all consumables and manage the stock of items to ensure that those critical areas never run short.

Corporate Clean Property Services have been established for over 20 years and have recently re-structured it's business to expand it's operations to the eastern states. If you would like Corporate Clean Property Services to inspect your site with a view to managing the cleaning please contact Mark on 0411 499 664.



For more information contact Corporate Clean Property Services, 18A Gumbowie Avenue Edwardstown SA 5039, phone 08 8277 4555, fax 08 8277 4655, website: www.corporateclean.com.au.

Established in 1997, Enviro Sweep is Australia's largest privately owned specialist road and site sweeping contractor. Boasting a comprehensive fleet of sixty modern, well maintained and compliant sweepers, Enviro Sweep is capable of undertaking projects of any size, any where throughout Australia. With an experienced and knowledgeable team, Enviro Sweep have successfully completed a range of prolific projects, including the Adelaide Desalinisation Plant, the South Morang Rail Extension Project, the Northern Expressway Project and of course, the Seaford Rail Extension Project.

Regardless of the demanding construction and infrastructure field that focuses on environmental and OH&S performance, Enviro Sweep remain at the forefront of the industry, taking pride in their excellent safety record and leading operator training. Furthermore, their well maintained units not only effectively clean desired areas, but also provide excellent water delivery capability and ensure the issue of airborne dust is effectively controlled and managed.

Able to offer around the clock, professional service to a variety of projects, it is without a doubt Enviro Sweep will deliver optimum project results and client satisfaction every time.

For more information contact Enviro Sweep, phone 1300 610 416



Above Enviro Sweep successfully completing the Seaford Rail Extension Project.

Corporate Clean Property Services undertook the cleaning of the Seaford Rail Link Project site in August 2011 after successfully tendering for the contract. The Seaford Rail Link site comprises of around 40 modular huts each 12m x 3m with unsealed vinyl floors. These are arranged in varying formats from site offices to meeting rooms, medical facilities lunchroom/crib huts, and washroom/toilet facilities.

CCPS also clean the Adelaide Aqua Desalination Plant project site which commenced in November 2010 after being awarded the contract due to the failure of two previous companies to maintain the standard, this site comprised of over 100 modular huts, in a similar harsh environment.

Traditionally the modular units are fitted with a vinyl floor, which in it's raw form is porous. In consultation with key staff from ThiessMcdow, CCPS recommended that a seal be applied to the vinyl floors of the main site office and medical centre, which seals the microscopic holes of the vinyl preventing dirt entering and settling on the surface. This also provides efficiencies in cleaning as it becomes much easier to maintain.

Due to the harsh environment of construction sites substantial dirt and mud is trampled into the office area's. Inexperienced cleaners simply mop the floor without changing the water at frequent intervals, this allows dirty