







From humble beginnings in Sydney's Sutherland Shire, Salix has grown to become one of the leading rail product companies in Australia, New Zealand and Chile.

Salix is an Australian owned and operated rail business engaged in the design and supply of railway products throughout Australia and multiple international markets.

We pride ourselves on providing a level of quality and service over and above our clients expectations. Our attention to detail and industry experience ensure that we understand our clients' needs and provide an engineering solution unparalleled within the industry.

Our core business started with Turnout design, supply, installation and maintenance and expanded to Buffer Stops, Crane Rail Systems, Points Operation, slab track systems, and construction specific products. We have grown to include a Green Range which has a selection of low carbon alternatives for the rail corridor.

Today, we are an Authorised Engineering Organisation and supply international markets with some of the best rail products in the world.



18+ Years in the

Industry



Office Locations
Australia,
New Zealand
and Chile



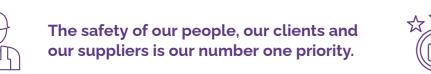
Our team of experts is enabling rail infrastructure projects through innovative and sustainable design solutions.

Salix has a large team of qualified, experienced and driven individuals with a shared love for teamwork and all things rail.

We have built our business on delivering the projects that have a high degree of technical expertise.

designers and external partners ensures

Our established team of rail engineers, Salix is a product leader across international rail infrastructure markets.







We collaborate with our clients to understand their needs and provide effective solutions.

Salix delivers the whole supply process from initial order, design, manufacture, delivery and through to final construction completion with a focus of quality assurance at each step.

Our product design and supply team provides type-approved Turnouts, Buffer Stops and Points Operation so we can quickly deliver proven rail solutions and fast-track construction projects.

Much of our work is delivered within complex, live operating rail environments for major government and tier one companies in Australia and New Zealand.

Salix delivers all our projects to the highest levels of quality, safety and assurance. We are accredited and certified and we continually improve our systems to meet the demands of industry.









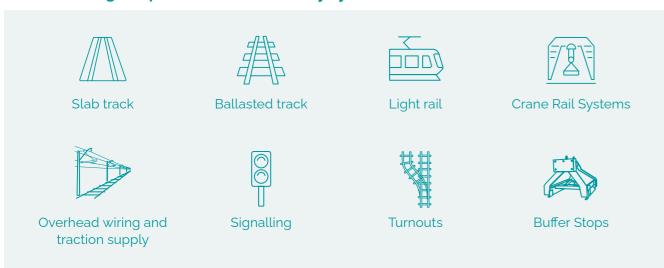


our **CAPABILITIES**

We have a strong product supply alliance in Australia and exclusive supply partners overseas. We pride ourselves on providing a high level of knowledge, quality and service over and above client expectations.

Our mission is to deliver the highest standard in quality and service to Australia, New Zealand and multiple international markets for all types of railways – light rail, metro rail, passenger rail, freight, heavy haul rail and specialised crane rail.

Extensive range of products for all railway systems needs





our CLIENTS

Salix is supported by a blue-chip customer base across its core markets, many of which are long-standing customers of the business providing recurring project work or ongoing multi-year contract terms.





































































our **SUPPLY CHAIN**

Our supply chain has the flexibility to cater for small to large scale projects. We work with local and international suppliers to provide quality world-class leading rail products.

The approach of full project management with multiple supply routes enables the end user to gain access to high end product technology while receiving all the assurances of a quality supply package from one source.



▶ The Plan and Strategy

We have customisable supply system to maximise customer value and gain a competitive advantage in the marketplace.



Material and Services

We have strong supply alliance in Australia, and we also have exclusive supply partners overseas.



Delivery and Logistics

We have logistic experts to provide dedicated solutions for railway products, e.g. bulk shipping of 27.5m lengths of rail, containerised shipping of complete Concrete Bearer sets.



Manufacturing

We have advanced systems to continually monitor factory productivity and improve efficiency.

our **PROCESS**

Enabling solutions



Quality Management



Certified ISO 9001 Quality Management System



In-process manufacturing inspections



Detailed Inspection and Test Plans



100% inspection prior to shipping and on arrival



Internal audits and third party inspections



Certificates of conformance





Specialist products for the rail corridor



Construction



We have established and proven local and international supply

process during and after the project is complete.

relationships to source any product that is used in the construction

We have in-house designers focussed on developing new products that can increase construction efficiency and productivity, improve on

site safety, reduce rework and wastage and increase sustainability.



Dabico-400hz-eGPU



Concrete Green Sleepers



Salix has introduced the Green Range, innovative low carbon and sustainable products for the rail market. Our Green Range will benefit our customers with their de-carbonisation and sustainability goals. The range includes our Green Concrete Sleeper, Composite Sleeper, and Sonneville Low Vibration Track (LVT) System.



Complex turnout design





Gantrex Crane Rail System Solutions



Design and supply of complex points operation



Rail manufacture and supply



Turnouts

Salix has combined Turnout design experience of 125 years and unsurpassed knowledge of the life span of a Turnout which leads to innovative design solutions that not only benefit the end user but the constructor and maintainer during each phase of the products life cycle.



Crane Rail Systems

Through our close partnership with Gantrex, we can supply European and North American crane rail to the Australian and New Zealand Market. We can provide crane rail profiles to meet various standards. Utilising Gantrex' regional warehouse in Malaysia we are able to supply with competitive lead times.



Points Operation

Salix has gained type and design approvals to supply Rodding and Points Operation systems throughout Australia.

Salix's Turnout design experience has led to expertise in designing interchangeable rodding systems for Tangential and Conventional Turnouts and Catchpoints.



Rail Supply

We can provide rail to suit track including light rail (groove rail sections), freight and passenger rail, heavy haul rail and crane rail.

All our rail is manufactured to exacting requirements that meet Australian, European and AREMA standards.

Rail can be provided in any rail section to suit.



Salix is the premier designer and supplier of solutions-based Buffer Stops in Australia, working closely with designers to ensure the highest safety standards are met with this critical track product.

We have supplied Buffer Stops to all the major railway owners in Australia and key partners in overseas markets. We have type approval Sydney Metro, TfNSW, ARTC, MTM, PTA and Queensland Rail networks.

Salix has a full product range and can supply:

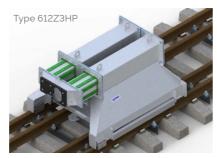
- ► Fixed only Buffer Stop end of line fixed-position stop for low-speed impacts.
- Friction only Buffer Stop rigid frame system with friction sliding shoes to decelerate train impact.
- ► Fixed hydraulic Buffer Stops end of line fixed-position stop with hydraulic ram for impact reduction.
- ▶ Hydraulic friction combination Buffer Stops rigid frame system with friction sliding shoes and hydraulic ram for extra retardation at higher impact forces.
- ▶ Crane rail Buffer Stops Special crane rail fixed and fixed hydraulic stops for use in crane rail environments.

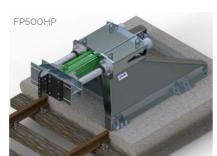












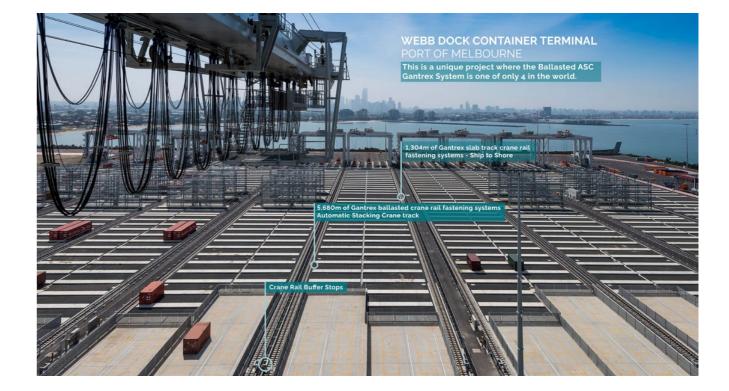
Exclusive distributor of all Gantrex products throughout Australia and New Zealand.

Through our close partnership with Gantrex, Salix can supply market leading crane rail solutions. Gantrex has over 40 years of world leading expertise and product design within the crane rail market providing solutions for ports and maritime as well as rail and mining applications.

- ▶ RailLok clips Gantrex patented clips are at the core of the soft-mount crane rail solutions and can fit almost every rail profile available worldwide.
- ▶ Trenchlok full berth cable tray solution to ensure crane cables remain dry and require minimum maintenance.
- ▶ Hingeguard custom short rail solution for Ship-To-Shore (STS) cranes which reduces vibration and shocks for crane operators and comes with a two million cycle guarantee.
- Trench infill custom recycled rubber panels to suit your rail trench to increase ease of maintenance and eliminate bitumen and grout.

Other products include:

- ▶ Trolley rails
- ▶ Rail clips
- ▶ Rail pads
- Rails
- ▶ Rail welding
- Installation and maintenance
- Steel supports
- ▶ End stops and buffers
- ▶ Cable protection system
- Consulting and engineering
- Grouting and anchoring
- Rubber products
- ▶ Tieback assemblies
- Embedded tracks





Salix has gained the reputation as the go to company for complex/special engineered track work solutions.

Manufacturing

Salix is the premier supplier of Turnouts and have exclusive partners around the world, providing us access to the latest manufacturing technologies. All Turnout products are proven in tough operational climates, remote locations and busy urban centres.

Our world-class facility produces thousands of Turnouts, Switch Rail, Solid Manganese Crossings and rail accessories every year. We have sufficient capacity to meet project demands and the delivery programs to suit the project.











Temporary Take Off Turnout

Our unique award winning Temporary Take Off Turnout allows creation of a temporary siding to store and move track machines of up to 23 tonne axle loads on and off track at will.

Once the track machine is located on the temporary siding it is as simple as removing two switch ramps and a crossing ramp, in order to restore mainline running.

The unique design can be used on AS47kg, AS53kg and AS60kg rail on most types of sleeper and rail fastening systems. This design opens up timetabling allowing flexibility as track machines do not need to travel large distances to clear the mainline.

Upon completion of work, the whole Turnout can be removed and relocated to a new site for reuse with no effect on the mainline track.



Salix was contracted to design, manufacture and supply Scissor Crossover and Rodding to be installed in the tunnel at Britomart East Station in Auckland New Zealand.

Scope of Supply

▶ 1 in 7.5 Scissor Crossover on Delkor Eggs and associated Rodding

Derailers and Crowders

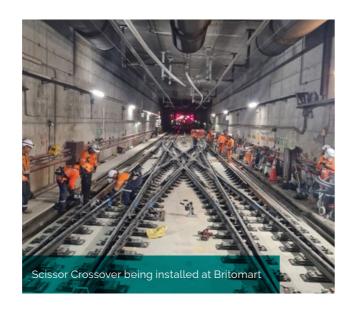
Salix is able to fully design, supply and install derailer assemblies to your requirements.

We can supply many different derailers:

- With/without crowder
- With/without detection
- Motor- or lever-operated
- Portable







Wheel/Rail interface study

Salix can perform wheel interface studies during the Turnout design stage to identify all the safety critical areas which can impact the performance of our Turnouts. Our team identify any possible issues during the design phase and make necessary improvements, ensuring the safety in design and product performance prior to manufacturing.



Scissor Crossover with Diamond – Forrestfield Airport Link, WA

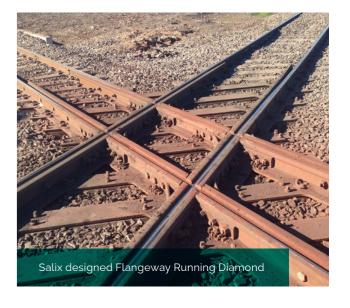
Scissor Crossover with Diamond where Turnouts are with Swing Nose Crossing (SNX) on the Delkor Eggs

- X2 1:10 scissor crossovers with SNX both with different track centres
- ▶ Supplied with Delkor Eggs, precast slab panels
- ▶ Full points operation supply
- Detailed Design Report
- Detailed Inspection procedure (with optional 3rd party – SGS)
- Detailed Quality Pack with IFC drawings, material certificates, check sheets, SGS report
- Special marking for easy identification of steelwork at site during the construction.



Flangeway Running Operation

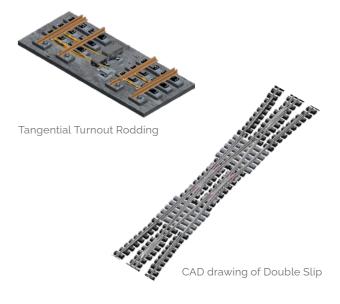
Salix has designed and supplied Flangeway Running Crossings, Gauge Splitters and Diamonds for axle loads of up to 54 tonnes. These flangeway running systems are optimised for wheel transfer safely through the crossing area. The flangeway running surfaces are designed with fully interchangeable blocks to quickly and effectively change out in track for reduced maintenance time.



Pre-Assembly services at our manufacturing facility

We perform planned product inspections for all components during pre-assembly to prove compliance, performance and quality. Third party quality inspections can be arranged to ensure maximum integrity of the product.









ClientMELConnx Alliance



Date

April 2022- July 2024



Location

Perth, Western Australia

Part of METRONET, the single largest investment in public transport in Perth's history, the project includes the delivery of 21km of rail between the existing Bayswater Station and Ellenbrook, including five brand new stations. Salix were engaged to supply Turnouts, Junction Rails and Expansion Switches for The Morley-Ellenbrook Line.

Scope of Supply

Bayswater Station

- ▶ AS60kg Head Hardened 2 1 in 12 Narrow Gauge Swing Nose Turnout
- ► AS60kg Head Hardened 1 1 in 16 Narrow Gauge Swing Nose Turnout
- ▶ AS60kg Head Hardened 1 Left Hand, 1 in 16 Mixed Gauge Swing Nose Turnout
- ▶ AS60kg Head Hardened 1 Right Hand, 1 in 16 Mixed Gauge Swing Nose Turnout

Ellenbrook Station

- ▶ AS60kg Head Hardened 4 1 in 12 Narrow Gauge Swing Nose Turnout
- ▶ 38 pieces of Junction Rails
- Additional 95 Turnout Bearers
- ▶ 14 sets of Insulated Rail Joints
- ▶ Both 1 in 12 and 1 in 16 have been Approved by PTA





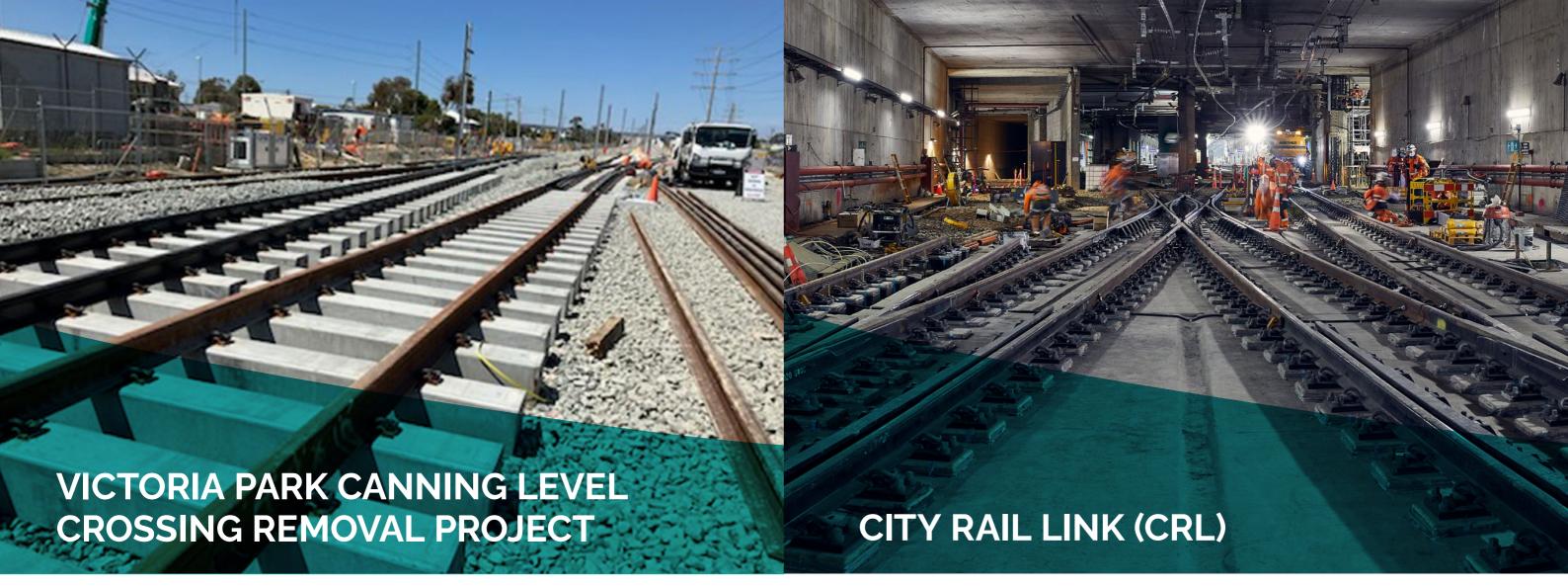
DateJanuary 2024 - present

LocationPort of Somerton, Victoria

One of Victoria's major freight infrastructure projects, the Somerton Terminal upgrade will integrate with the Port Rail Shuttle Network to accommodate double-stacked trains upon completion of the Inland Rail Freight Corridor. Located 21km from the Melbourne CBD, at its completion it will be Australia's largest rail terminal alleviating half a million truck trips from nearby roads.

Salix are working collaboratively with Acciona to design, manufacture, supply and deliver a combination of complex Turnouts, based on ARTC standards. In addition we were engaged to supply the Gantrex Crane Rail Systems for the outer terminal.

- ► AS50kg 19 1 in 8 Dual Gauge Turnouts
- ► AS60kg 3 1 in 8.25 Standard Gauge Tangential Turnouts
- ► AS50kg 1 1 in 9 Dual Gauge Tangential Turnout
- ► AS60kg 2 1 in 10.5 Standard Gauge Tangential Turnouts
- ▶ AS60kg 2 Three Way Turnouts
- ▶ Gantrex Crane Rail Systems





Client

Armadale Line Upgrade Alliance (ALUA)



Date

November 2022 - Present



Perth, Western Australia

Part of METRONET, the single largest investment in public transport in Perth's history, the Victoria Park-Canning Level Crossing Removal Project will see five level crossings removed along the Armadale Line by raising the rail over the road at Mint Street, Oats Street, Welshpool Road, Hamilton Street and Wharf Street.

The aim is to improve safety, create more connections, ease movements in the area, revitalise the corridor, modernise stations and create versatile public spaces for the community. Salix were engaged to supply Crossovers for the Cannington Railway Station on the Armadale Railway Line, as well as Friction Buffer Stops for Victoria Park Station.

Scope of Supply

- AS60kg 2 RH Narrow Gauge 1 in 12 Crossover
- AS60kg 2 LH Narrow Gauge 1 in 12 Crossover
- ▶ 2 Friction Buffer Stops



||||||||||| Link Alliance/Martinus



Date

June 2019 - present



The CRL is a 3.45km twin-tunnel underground rail link up to 42m below the Auckland city centre. It will transform the downtown Waitematā Station (Britomart) into a two-way through-station that better connects the city's rail network. It allows the rail network to at least double rail capacity.

Scope of Supply

C3, C5, C7: Mt Eden

- NZR50kg 4 1 in 18 Turnouts on concrete bearer
- NZR50kg 2 1 in 18 Turnouts on LVT blocks
- NZR50kg 1 1 in 9 Scissor Crossover on LVT block

C8: Newmarket

- NZR50kg 1 1 in 9 LH Turnouts on Delkor Eggs
- NZR50kg 1 1 in 9 RH Flexure Turnout on Delkor Eggs
- NZR50kg 2 special Diamonds on Delkor Eggs
- Diamonds spares
- Critical spares for Turnouts and curved check rails

C9: Britomart

- NZR50kg 1 1 in 7.5 Scissors on Delkor Eggs with Point Rodding
- NZR50kg 1 1 in 7.5 Double Slip on Sonneville LVT Blocks system with Point Rodding
- NZR50kg 2 1 in 9 on Sonneville LVT Blocks System with Point Rodding
- NZR50kg 1 1 in 9 Turnout on Composite Bearers with Point Rodding







Date

Jan 2020 – Jul 2021



Forrestfield Airport Link (\$1.86B) project is jointly funded by the Australian and Western Australian governments and will deliver a new rail service to the eastern suburbs of Perth with three new stations at Redcliffe, Airport Central and High Wycombe.

The rail link forms part of the METRONET vision to create liveable communities connected by world class public transport. The line will spur off the existing Midland Line near Bayswater Station and run to High Wycombe through twin-bored tunnels.

The scope involves manufacture and supply of AS60kg - Turnouts and Scissor Crossovers. The below scope was manufactured and delivered within ten months from signing of the contract.

Scope of Supply:

- ▶ AS60kg 2 1 in 25 LH/RH Turnouts with Swing Nose Crossings on concrete bearers
- ▶ AS60kg 8 1 in 10 LH/RH Turnouts with Swing Nose Crossings on Delkor Eggs
- ▶ AS60kg 2 1 in 4.95 Diamond Crossing on Delkor Eggs
- 20 sets of Points and Swing Nose Crossing Rodding arrangement







Based in Rockhampton, Salix delivered Turnouts for a 210km rail link from the Carmichael Mine to the existing Central Queensland Coal Network.

Known as one of the most logistically complex and environmentally sensitive projects delivered in Australia, the full scope of works includes, construction of 86 kilometres of rail formation works, 10 new multi-span bridges and installation of over 40km of culverts.

- ➤ AS60kg 5 1 in 12 Turnouts with RBM Crossings on concrete bearers
- ► AS60kg 5 1 in 16 Turnouts with SNX Crossings on concrete bearers
- ▶ AS60kg 5 Flexi Catch Points on concrete bearers
- ► AS60kg 3 Temporary Turnouts
- ▶ 46 Guard Rail Noses







Date

Apr 2016 – Present



Kiwi Rail Holdings Limited is a New Zealand State owned enterprise responsible for the rail operations in New Zealand. Kiwi Rail is also known as the largest rail transport operator which provides New Zealand's freight, passengers, and supply chain industries the most cost effective and sustainable solutions.

Our exclusive supply agreement with KiwiRail involves design, manufacture and supply new standard Tangential Turnouts, Crossovers, and Turnout Rodding to the New Zealand market. These new standard Turnouts feature the highest standard of components improved the overall performance and product cycle life.

Scope of Supply:

Over 450 Turnouts to date including:

- NZR50kg 250+ Tangential Turnouts (R96, R140, R250 and R560)
- NZR50kg − 25+ Tangential Crossovers (R96, R140, R250 and R560)
- ► NZR50kg 5 Scissors Crossovers
- NZR50kg 5 Double and Single Slip
- NZR50kg Track Spares
- Points Rodding suitable for New Zealand National Track Levers
- ▶ Points Rodding suitable for M23A/M3A Points Machine





Date

Apr 2018 – Jun 2019



Inland Rail is a 1,600km freight rail line, now under construction. It will connect Melbourne and Brisbane via regional Victoria, New South Wales and Queensland. Parkes to Narromine comprises 98km of existing track and 5km of new track.

It will connect the ports of Melbourne and Brisbane along a new route west of the mountainous Great Dividing Range, bypassing the busy Sydney metropolitan area and allowing for the use of double-stacked freight trains. The route will also connect to the Sydney-Perth rail corridor, reducing journey times between Brisbane, Adelaide and Perth.

The first stage involves manufacture and supply of AS60kg - Turnouts and Catch Points. The following scope was manufactured and delivered within ten months from signing of the contract.

- ► AS60kg 11 LH/RH Turnouts
- AS60kg 11 6100 Flexi Catch Points
- 22 sets of Points and Catch Point M23A-MKII Rodding





Client Qube



Date

Aug 2019- Jun 2023



Moorebank Logistic Park is a nationally significant infrastructure development that will transform the way containerised freight through Port Botany (Sydney) and deliver a faster, simpler and more cost-effective service for business and consumers.

At full operation, the facility will have the capacity to shuttle over one million shipping containers annually between Port Botany and Moorebank by rail instead of road, taking about 3,000 heavy truck movements off Sydney's road network every day.

The project is set to become Australia's largest logistics development, will incorporate the latest automated freight handling technology including automated electric gantry cranes. An additional rail terminal servicing regional NSW and interstate is due for completion in 2024. The total 850,000sqm of warehousing is being delivered in stages over a ten year period, based on demand and uptake.

Scope of Supply:

- ▶ AS60kg 25 R160 1 in 8.25 Turnouts
- ▶ AS60kg 1 R250 1 in 8.25 Turnout
- ▶ AS60kg 1 60kg R500 1 in 8.25 Turnout
- ▶ 3,000T of AS60kg rail
- ▶ 4,000m plus of AS86 crane rail
- ▶ 3,400 bespoke designed Monorail **\Concrete Sleepers**
- ▶ 7,540 adjustable chairs
- ▶ 3,0160 patented galvanised RailLok W15 clips
- ▶ 4 fixed hydraulic Buffer Stops specifically designed for the loco shifter





Date

Mar 2017 - Jul 2017



Location

The Gold Coast Light Rail Stage 2 Project is an extension to the Stage 1 works and links the Gold Coast University Hospital with the Helensvale heavy rail station.

This involves approximately 7.5km of dual ballasted track, one kilometre of dual embedded track, and a section of slab track at the GCUH including Gauntlet Diamond and Crossover. Along the alignment will be five new stations, two of which will be constructed at a later date.

This project involves manufacture and supply of 51R1 - Grooved Rail Gauntlet Tracks and Diamond Crossing and 49E1 - Scissor Crossover and LH Crossover. The below scope was manufactured and delivered in record time.

- ▶ 51R1 Gauntlet Track for Gold Coast University Hospital
- ▶ 51R1 Diamond Crossing for Gold Coast University Hospital
- ▶ 51R1 Turnout for the Gold Coast Depot
- ▶ 49E1 Scissor Crossover for Helensvale
- ▶ 49E1 Crossover for Parkwood
- ▶ 51R1 and 49E1 IRJs and transition rails







Date Oct 2020 – Present



Cross River Rail is a 10.2km rail line from Dutton Park to Bowen Hills, which includes 5.9km of twin tunnels under the Brisbane River and Brisbane CBD.

The project includes construction of four new underground stations at Boggo Road, Woolloongabba, Albert Street and Roma Street.

It will also deliver upgrades to eight above ground stations including: Salisbury, Rocklea, Moorooka, Yeerongpilly, Yeronga, Fairfield, Dutton Park and Exhibition.

Scope of Supply:

A total of 97 Turnouts to date:

- ▶ AS50kg 26 1 in 8
- ▶ AS60kg 34 1 in 12
- ▶ AS60kg 3 1 in 16
- ▶ AS60kg 13 1 in 8.25
- AS60kg 7 Catch Points
- ▶ AS60kg 1 Scissor Diamond Crossover
- ▶ AS60kg 7 Dual Gauge Turnouts
- ► AS60kg 4 Dual Gauge Catch Points







Design Manufacture and supply Buffer Stops for the Sydney test tracks and maintenance shed roads.

- ▶ 2 BP506 Friction Buffer Stops
- ▶ 11 BP504 Friction Buffer Stops
- ▶ 4 FP600HP Fixed Hydraulics Buffer Stops

our **PROJECTS**



