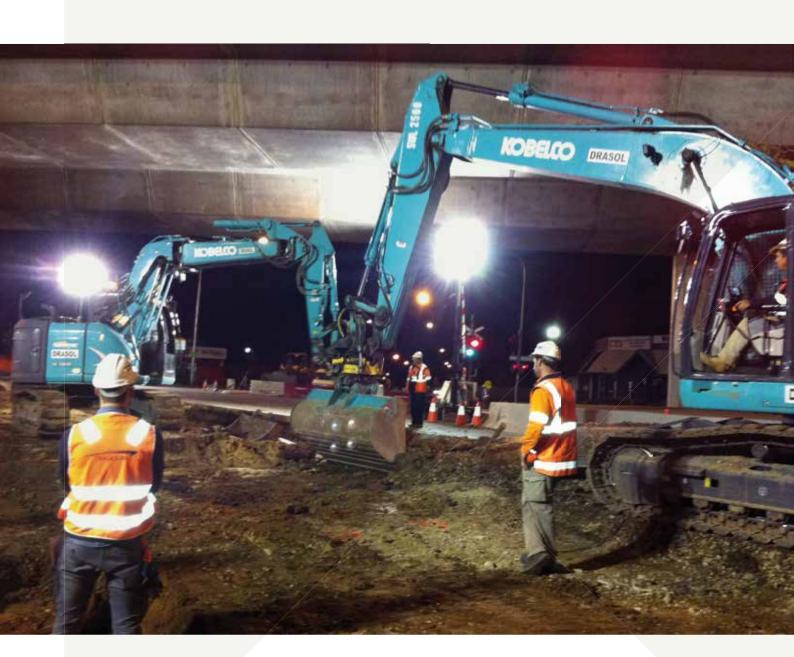


## Rail Capability Statement

Delivering reliable and safe rail services





### Introduction

### In 1998, Andrew Farrer and David Farrer joined forces to form DRASOL.

From there, we have grown to service the rail, civil, solar and waste water treatment industries in Australia. A family business, wholly South Australian owned and operated, made up of real people with the technical skills, expertise and equipment to get the job done.

At DRASOL we see investing in sustainability as the way to best serve our people, customers and communities we work in. This is our way of improving where we live today and for tomorrow.

Our values are based on reliability, respect, honesty, pride and integrity. These are the principles that define what we stand for at DRASOL and are at the core of everything we do.

Our purpose is to be an innovative and solutions-based company dedicated to these core industries in Australia.

As we grow and evolve, we always look out for each other and strive to do the safe and right thing by our people, customers and communities. It is this willingness to rise to the challenge that has taken us from our beginnings to becoming an innovative, solutions-based company, always open to new ideas and new ways of improving.

# Providing services for delivery of reliable and safe rail infrastructure

Rail in Australia underpins the national economy and is at the forefront of innovation, productivity and world's best practice.

Australian rail continues to push the limits of efficiencies for business across the world. Recently a heavy investment in technological advancement and product development has ensured we continue to be a competitive player within the global market place.

DRASOL has been involved in the rail industry for many years. With extensive experience across light and heavy rail, in both broad and narrow gauge formats in the live corridor, DRASOL is well placed to support our clients with their rail projects.

#### Our key services in rail comprise:

- Under-Track Crossings
- Signalling Pit and Pipe Infrastructure
- Stormwater Culverts
- Swale Drains and French Drains
- Erosion Control
- Station and Platform Demolition and Upgrades
- Car Parks, Street Lighting, Pump Stations
- Multiple Road Level Crossings
- Formation, Stabilisation and Reinstatement work





## Highly trained and certified workforce

DRASOL was contracted for a 4 year period by the Tracksure D&C joint venture responsible for the entirety of the Adelaide Metropolitan Rail Revitalisation Programme.

This exposed DRASOL to many aspects of the rail industry sector. By combining our in-ground services expertise with civil works experience, DRASOL provide a quality solution for stormwater drainage, signalling infrastructure, formation reconstruction and carriageway level crossings.

DRASOL have the capability to provide a highly trained workforce with all current certification to satisfy Rail Safe-Working Management requirements. This offers peace of mind to our clients, knowing we mitigate operational and project management risks.

Key to our success is our core capability and strength in carrying out signalling and drainage works in the rail corridor under challenging conditions and time constraints.

#### Our purpose-built and aftermarket modifications provide specialised rail-sector plant including the following:

 23 tonne Excavator with Engcon head (360-degree rotation with tilt capability) with rubber pads

- 13 tonne Excavator with Engcon head with rubber pads
- Specialist 4 in 1 bucket
- Fork tines & hydraulic compaction attachments to suit
- · Rail threader
- Sleeper grab
- Remote-controlled trench compaction unit
- Portable GPS survey control equipment



## Our core capabilities



Technical experience

DRASOL have a highly trained workforce with all current certification to satisfy Rail Safe-Working Management requirements.



• Quality management system

In-house developed Quality Management System tailored to suit diverse rail projects, incorporating a full suite of supporting documentation to satisfy Rail Safe-Working Management requirements.



Purpose-built and after-market modifications

Our purpose-built and after-market modifications provide specialised rail-sector plant.



Extensive experience

DRASOL have extensive experience across light and heavy rail, in both broad and narrow gauge formats in the live corridor.





Value-added services

Our value-added services extend to: Under-Track Crossings; Signalling Pit and Pipe Infrastructure; Stormwater Culverts; Swale Drains and French Drains; Erosion Control; Station and Platform Demolition and Upgrades; Tactile Installation; Car Parks, Street Lighting, Pump Stations; Multiple Road Level Crossings; and Formation, Stabilisation and Reinstatement work.



Diversity in projects

By combining our in-ground services expertise with civil works experience, DRASOL provide a quality solution for stormwater drainage, signalling infrastructure, formation reconstruction and carriageway level crossings.



Industry best practice approach

Acknowledgement of current industry best-practice as the benchmark for our rail standards of service and certification.

## DRASOL Rail ProjectsHistorical Timeline

1998	Adelaide Outer Harbour Line, Stage 1 and Stage 2 – Davison Earthmovers
1999	SA Regional Sidings Upgrades, Pinnaroo and Crystal Brook – John Holland
2000	Glenelg Tram Line Maintenance Contract – John Holland SteamRanger Heritage Railway Line Maintenance – John Holland
2007	Glenelg Tram Line Resleepering, South Terrace – Davison Earthmovers
2008	Glenelg Tram Line City-City West Link, Adelaide CBD – Coleman Rail
2009	Glenelg Tram Line Signalling Upgrade, South Terrace – Coleman Rail Belair Line Upgrade, Adelaide Metro – John Holland/Coleman Rail JV Craigieburn Rail Project, Victoria – Coleman Rail
2010	Glenelg Tram Depot Upgrade, Adelaide Metro – Tracksure JV
2011	Tottenham Track Slew, Victoria – Coleman Rail
2011/14	Adelaide Metropolitan Rail Revitalisation Programme – Tracksure JV
2013	Adelaide Rail Electrification Programme-Traction Power – John Holland
2017	Torrens Junction Grade Separation, Adelaide Metro – Geotech Port River Bridge Upgrade, Adelaide Metro – Coleman Rail
2018	Outer Harbour Line Level Crossing Upgrades, Adelaide Metro – Coleman Rail
2018/19	SteamRanger Heritage Railway, Mt Barker and Currency Creek – Coleman Rail
2017/ONGOING	Public Transport Services Maintenance Contract, Adelaide Metro – Coleman Rail



#### **OUTER HARBOUR LINE RESLEEPERING PROJECT**

DRASOL's initial foray into the rail industry was to support Davison Earthmovers with the resleepering of this metropolitan rail line.

Our company gained invaluable knowledge by working with the experienced people involved in this project, and this proved to be a springboard for growth and evolution into the organisation that we are today.

In the 20 years since then we have worked with the head contractor John Holland on multiple projects across a broad range of size and complexity and are still enjoying that business relationship to this day.



CLIENT	Davison Earthmovers
LOCATION	Adelaide Metro
SERVICES	Resleepering, minor earthworks
TIMELINE	1998



#### **EASTLINK TRAM EXTENSION PROJECT, ADELAIDE**

The first stage of works for the expanded AdeLINK tram network, EastLINK is an extension of Adelaide's tramline along North Terrace to the East End of the CBD.

DRASOL provided multiple work crews to support the JV in many aspects of project delivery, from pre-works service relocation to new signalling infrastructure, track drainage, excavations for turnouts, formation preparation and pavement reinstatement.

#### Works carried out included:

- Service location
- Hydro-vac excavation
- Signalling pit and pipe infrastructure
- Detailed excavation and demolition
- Minor concreting and pavement construction
- Street lighting and furniture installation

The project comprised a variety of shutdown and out-of-hours working scenarios in a live-traffic environment, with significant interfaces with local businesses and the general public.

Our autonomous work groups operated under full Rail Safe Working throughout the project, including activities under existing overheads being managed by our in-house PRES (Person Responsible for Electrical Safety).



CLIENT	Downer EDI-York Civil Joint Venture
LOCATION	North Terrace, Adelaide
SERVICES	In-ground services, road crossings, track drainage, street furniture
TIMELINE	2017-2019

#### STEAMRANGER HERITAGE RAILWAY UPGRADES

The SteamRanger is a historical railway operating a number of different heritage steam and diesel hauled tourist trains between Mt Barker and the coastal holiday towns of the Fleurieu Peninsula.

DRASOL were engaged by Coleman Rail to carry out level crossing replacement works at two locations where timber sleepers were still in place in the road pavement.

#### Services included:

- Pavement and track removal
- Bulk excavation
- Formation treatment and reinstatement
- Drainage and signalling infrastructure
- Sleeper installation
- Ballast & pavement reinstatement

Due to its rural location one of the crossings was reconstructed whilst maintaining traffic flow through the site, an unusual scenario where DRASOL's ingenuity and ability to operate outside of the square enabled the smooth completion of the works.



CLIENT	Coleman Rail
LOCATION	Mt Barker and Currency Creek, SA Regional
SERVICES	Level crossing upgrade, track maintenance
TIMELINE	2018



#### **GLENELG TRAM LINE VICTORIA SQUARE TO CITY WEST EXTENSION**

The extension of the Glenelg Tram Line from Victoria Square through the CBD necessitated significant pre-works under live traffic conditions to minimise disruption to the city prior to the major shutdown works.

Over a 7 month period of night works DRASOL were engaged to install new signalling ducts and pits across each of the future tram/road intersections.

Services carried out included:

- Hydro-vac excavation and service locating
- Road crossings for signalling infrastructure
- Relocation of street lighting and furniture
- Electrical conduit and pit installation
- Pavement and footpath reinstatement

Due to the historically urban nature of the location there were a myriad of undocumented services and in-ground structures that had to be incorporated, modified or worked around during these time-critical out-of-hours shifts.



CLIENT	Coleman Rail
LOCATION	Adelaide CBD
SERVICES	Traffic signal modifications, street lighting and furniture, pavement reinstatement
TIMELINE	2009 & 2015

#### ADELAIDE METROPOLITAN RAIL REVITALISATION PROGRAMME

As part of the South Australian Government's plan to revitalize the public transport network over a 10 year period, the entire existing rail passenger network was upgraded. The Rail Revitalisation Programme was the centrepiece of the Department of Transport and Infrastructure's investment and transformed the rail network.

DRASOL were engaged by
Tracksure to deliver the majority
of the drainage and signalling
infrastructure upgrades, as well
as providing a turn-key solution
for level crossing replacement
and re-sheeting activities.
Almost 80 km of formation
drainage and 30 level crossings
were upgraded during the
course of this significant capital
works project.

#### Work packages delivered included:

- Level crossing construction and replacement
- UTX (under track crossings)

- Track formation drainage
- Signalling infrastructure
- Station excavation and formation construction
- Major Council stormwater installation (1.6m diameter RCP)
- Pump stations
- · Culverts and headwalls
- Rock beaching and scour protection

DRASOL specialised in detailed earthworks and excavation activities in restricted access spaces, our zero-swing plant proving ideal for working in stations, cuttings and under bridges.

Our experienced crews are capable of stripping track, replacing and remediating formation, installing signalling and drainage and placing ballast and sleepers ready for the track construction gangs to complete the process.



CLIENT	Tracksure (John Holland, Coleman Rail and York Civil JV)
LOCATION	Adelaide Metropolitan Network
TIMELINE	2011-2014



#### **GLENGOWRIE TRAM DEPOT UPGRADE**

The Glengowrie Tram Depot was upgraded to expand and convert the stabling yards from a timber sleeper/ballast arrangement into a fully concreted track slab.

DRASOL were engaged to install signalling infrastructure, track drainage and carry out detailed excavation for new overhead power support gantries, storage buildings and tram wash facilities.

We also assisted with the replacement of the depot entrance turnouts after new office facilities had been constructed.

#### Services included:

- Trade waste and grease arrestors
- Wastewater and potable water service modifications
- Track formation and drainage
- Track slab pre-pour reinforcement preparation

This challenging project was delivered in a live-rail environment as the depot remained fully operational throughout the construction programme. Our crews were well-received on site due to their diligent approach to safety and adherence to strict electrical isolation procedures.



CLIENT	Coleman Rail and York Civil
LOCATION	Adelaide
TIMELINE	2010-2011 and 2019

#### **TOTTENHAM TRACK SLEW**

This project was embarked on to separate regional and metropolitan train services and make room for the future construction of a 40km twin track rail link from Southern Cross Station to West Werribee. The works were completed in a 7 week programme with a 2 week shutdown.

DRASOL were engaged during the time-critical shutdown period to provide round the clock crews installing cross track services, signalling pit and pipe infrastructure and track formation drainage.

#### **Services included:**

- Mobilisation of plant and personnel from Adelaide
- Signalling pit and pipe infrastructure
- Under track crossings
- · Track drainage



CLIENT	Coleman Rail
LOCATION	Tottenham, Victoria
SERVICES	Under track crossings, signalling infrastructure, track drainage
TIMELINE	2011



#### **CRAIGIEBURN RAIL PROJECT**

Facilitating the expansion of Melbourne's metropolitan passenger train network, the Craigieburn Rail Projects enable electric trains to be stabled, maintained and cleaned at a predominantly greenfield site at Craigieburn in Melbourne's outer north.

For two separate delivery components of these works DRASOL were engaged by Coleman Rail to provide multiple work.

#### Services included:

- Mobilisation of plant and personnel from Adelaide
- Signalling pit and pipe infrastructure
- Under track crossings
- Track drainage



CLIENT	Coleman Rail and York Civil
LOCATION	Craigieburn, Victoria
TIMELINE	2009



#### **DRASOL HEAD OFFICE**

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