

SHAMROCK CIVIL ENGINEERING **CAPABILITY STATEMENT**















ABOUT US

OFFICES



180+ EMPLOYEES



200+ CIVIL PLANT



30 YEARS IN BUSINESS



CONTRACT
CIRCA >\$80M

QLD VIC SA NTBrisbane Melbourne Adelaide Darwin

Townsville Rockhampton



Shamrock Civil Engineering is a privately owned civil construction company, delivering services to the gas and mining, transport infrastructure, commercial, Defence and government development sectors. Our team of more than 180 staff operate across offices in Brisbane, Townsville, Melbourne, Adelaide, Rockhampton and Darwin. Our business is driven by a collaborative approach to project delivery and the diversity of our skills and capabilities.

Shamrock Civil Engineering has been providing safe, sustainable and smart solutions since 1994. We are committed to our clients and place value and emphasis on creating and maintaining long term relationships. The breadth of our civil construction expertise combined with our integrated management system, enables us to deliver complex solutions efficiently and effectively. Through our comprehensive service offering, our priorities are maintaining the safety of our people, delivering better value for our clients and supporting our local communities.

Our key civil construction services include:

- Roads and bridges
- Dams and ponds
- Stormwater drainage and fittings
- Water pipelines and infrastructure
- Sewerage pipelines and infrastructure •
- Bulk earthworks
- Land and soil remediation
- Explosive Ordnance facilities
- Bulk fuels

- PFAS remediation
- Hardstand and lay down areas
- Building and construction pads
- Landfill cells and facilities
- Airport runways, aprons and ancillary works
- Railway holding and marshaling yards
- Sidings and station works
- In ground services excavation, trenching and conduiting



MINING, OIL & GAS

Shamrock Civil Engineering has successfully delivered large-scale civil construction projects to the mining, oil and gas sectors over the past 20 years, in remote and challenging locations in Australia. We have collaborated with clients to provide exceptional value in projects of all size and complexity.

- Bulk earthworks (>1,850,000m3)
- Detailed excavation (>300,000m3)
- HDPE, clay and coletanche liners (>1,200,000m2)
- Subgrade preparation
- Earth bunds and foundation preparation
- Trenching and pipeline installation
- Pond and dam remediation
- Access road and carpark construction
- Stormwater and culverts

KEY MINING, OIL & GAS PROJECTS:

- Santos Arcadia Brine Ponds
- Arrow Concentrated Brine Ponds
- Phosphate Hill Cell 3D Evaporation Pond, QLD
- Mungana Tailing Storage Facility Cell 1, QLD
- Biloela Escarpment Remediation Works, QLD
- King Vol Boxcut Chillagoe, QLD
- X41, Southern & SD12 Dams, QLD
- Kenya Ponds Remediation, QLD
- QGC BC/IX Ponds Northern Waters Treatment Plant, QLD
- Cameby Downs Mine Cell 1 Rectification, QLD
- QGC Sediment Ponds Northern Waters
 Treatment Plant, QLD
- APLNG Condabri WWT Ponds & Pads, QLD

Shamrock Civil has delivered a number of projects for Laing O'Rourke, demonstrating a genuine commitment to safety, quality, environment and overall project performance.

This was evident throughout the BC/IX Ponds Package project delivery and charactised by the careful planning, implementation and review of safe work methods and systems. The smooth and coordinated effort by the project team is a credit to their culture and expertise.

Laing O'Rourke acknowledges Shamrock Civil's professionalism and looks forward to maintaining a close working relationship that continues to meet expectations and provide mutual outcomes for all involved.

Laing O'Rourke



LANDFILL

Shamrock Civil Engineering have developed a wealth of experience in the landfill industry over the years, having completed several projects in Queensland and Victoria.

Through these projects, we have been able to broaden our capabilities and have gone on to secure landfill projects for other key clients. Working across these sites, Shamrock Civil Engineering has continued to develop a high standard of quality assurance, necessary for the auditing and approval of landfill cell construction and successfully carried out works on live landfill sites, with minimal disruption. Shamrock Civil Engineering has constructed landfill cells as large as 450,000m2 including:

- Bulk and detailed earthworks
- Compacted clay liners (GCL, HDPE & Geotextile)
- Leachate and groundwater collection systems
- Attenuation ponds
- Pipeworks and culverts
- Access roads
- Revegetation

KEY LANDFILL PROJECTS:

- Mitchell Landfill Leachate Dam Expansion
- Mitchell Landfill Cell 6
- MRL Cells 4C1-4 and 3C Construction
- Werribee Landfill Cell 6
- Cell 3 Dooen Landfill, Horsham
- New Chum Leachate Pond
- Fraser & Deals Rd Landfill Rehabilitation
- Plenty Landfill Rehabilitation Stages 2 and 3
- New Chum Cell 1+5 Batter Cap
- MRL Cell 4B1, & 4B3 Construction Inc Early Works
- New Chum Cell 3A
- Cell 6 Leachate Aggregate Placement VIC
- Springvalley Landfill Cap Remediation Leachate Collection Drain, VIC
- Melbourne Regional Landfill Cell 4A, VIC
- Wollert Landfill Construction of Cell 12, VIC
- Hallam Road Landfill Cell 12, VIC
- New Chum Cell 4B, QLD
- Melbourne Regional Landfill Cell 3B, VIC
- Hervey Range & Stuart Landfill, QLD
- Victory Road Landfill Cell 4B, VIC



RENEWABLE ENERGY

Renewable energy is produced using natural resources that are constantly replaced and never run out.

Shamrock Civil Engineering completed the Civil Works on The Sun Metals Solar Farm Project in January 2018.

This is currently Australia's largest solar farm, covering 120 hectares of land and generating 124MW of power. The Solar Farm is used to supply power to the Sun Metals zinc refinery near Townsville and its low cost will likely establish a \$300 million expansion in the future.

Shamrock Civil Engineering continue to embrace renewable energy technologies including solar, wind power and hydropower and remain committed to further expanding our capability within this market.

KEY RENEWABLE PROJECTS:

- Sun Metals Solar Farm Flood Rectification Works,
- Sun Metals Solar Farm Civil Works, QLD
- Australian Institute of Marine Science Solar Farm,
 QLD

"Our team were very happy with the works completed by Shamrock Civil. A hearty congratulations and thanks were given directly to the team, to thank them for a job very well done.

For myself, the Shamrock team have been a pleasure to work with. They have delivered high-quality work and made sure to meet all the on-site work requirements.

A big thank you to everyone for your help in ensuring that this project was smooth to work on and for delivering a high-quality result."

Kylie Mossop, Downer Group

Australia's largest solar farm, covering 120 hectares of land and generating 124MW of power.



DEFENCE

Shamrock Civil is an experienced contractor with a successful history of completing projects on various Australian Defence sites over the last 20 years for Tier 1 Builders and directly for Department of Defence. This provides the benefit of a workforce that has a strong knowledge of working within operational Australian Army facilities and the health and safety, environmental and quality expectations of Department of Defence.

Shamrock Civil Engineering pride ourselves as a specialist civil engineering company, providing construct options for Defence facilities including but not limited to- service installations and relocations, stormwater, wastewater and pipe works, roads, concrete works and landscaping.

When working within an operational environment we utilise our collaborative contracting model, and "no surprises" approach, to communicate consistently and effectively with all stakeholders. This ensures that we are minimising the impact of the construction on the existing operations of the sites we are working within. By maintaining open, honest and cooperative communication we can identify risks and opportunities and implement mitigation measures to effectively manage the requirements of individual projects.

KEY DEFENCE PROJECTS:

- Bradshaw Field Training Area 3 Year Road Works NT
- Townsville Field Training Area Civil Works
- Shoalwater Bay Training Area 3 year civil works
- Fanning River TFTA Demolition
- 3 Years Road- Lavarack Barracks Demolition Works
- ASMTI Stage 14 UOLF Western Civils & Stage 3
 Access Roads
- Cultana Training Area 3 Year Road Works, SA
- Townsville Field Training Area 3 Year Road Works
- Darling Downs Sporting Facility, QLD
- Townsville Field Training Area (TFTA) Waste Transfer
- Growler Project, RAAF Amberley- Jet Fuel, QLD
- Fence Upgrade Lavarack Barracks, QLD
- Air Traffic Control Tower Oakey Stages 3 & 22
- Compound Extension & Parking Bays Lavarack
- Air Traffic Control Tower (ATC) Townsville Stage 7
- Lavarack Barracks Road Maintenance, QLD
- Battlefield Airlifter- Early Works Services Diversion
- Urban Soh Roads Civil & Infrastructure, Evans Head
- LAND 121 Stage 2 Unit Sustainment Facilities, QLD
- Defence Logistics Transformation Program (DLTP)-Joint Logistics Unit Lavarack Barracks, QLD
- 17th Construction Squadron Civil Works, QLD
- 21st Construction Sqd Earthworks & Roadworks

Qualified professionals, with specialist experience, who understand the safety and security requirements of working within established Defence facilities.



TRANSPORT INFRASTRUCTURE

Shamrock Civil Engineering has experience working to stringent programs, dealing with multiple stakeholders and working in high volume traffic / pedestrian areas on many Transport Infrastructure Projects. We have successfully collaborated with various stakeholders on these including Queensland Rail, Government Sectors, Local Councils, Business Owners and Residents. We coordinate the works carefully, safely, without disruption to the local communities and with minimal interruption to existing services.

Shamrock Civil Engineering have successfully delivered multiple projects in the road and bridge, rail, airport and port sectors, including:

- Clearing and earthworks
- Bridge construction
- Roadworks
- In-ground services

Shamrock Civil Engineering has a strong understanding of the rail sector and operating environment, having successfully delivered multiple projects working adjacent to live railways, overhead electrification and under live rail conditions.

Seamless security interface and strict control measures by Shamrock Civil Engineering, has ensured that risks associated with airport projects do not affect the operations of the live airport facilities. Shamrock Civil Engineering understands the importance of compliance with all airport security protocols.

KEY ROAD & BRIDGE PROJECTS:

- Townsville Core Bulk Water Access Roads, QLD
- Kingsford Smith Drive, QLD
- Pacific Highway Upgrade Woolgoolga to Ballina, NSW
- D&C Chardon Bridge Replacement, QLD
- Kin Kora Intersection Upgrade, QLD
- Manus Island Road Repairs & Maintenance, PNG
- King Street North RNA Showgrounds, QLD
- D&C Edward O'Neill Bridge Replacement, QLD
- Bridge Rd & Paradise St Rehabilitation, QLD

KEY PORT PROJECTS:

- North Queensland Bulk Ports Stormwater, QLD
- Brisbane Container Terminal 11 Civil Works, QLD
- Port of Brisbane Shoulder Widening, QLD

KEY RAIL PROJECTS:

- Next Generation Rolling Stock (NGRS) Maintenance
 Depot Civil Works & Services, QLD
- Ferny Grove Train Station Upgrade, QLD
- Gold Coast Rapid Transit- Early Stormwater, QLD
- Salisbury to Kuraby Rail Upgrade Civil Works, QLD

KEY AIRPORT PROJECTS:

- Townsville Airport Ground Transport Package, QLD
- Brisbane Air Traffic Service Centre, QLD
- BAC Domestic Terminal Access Civil Works, QLD
- BAC International Airport Culvert Works, QLD
- BAC Multi-Level Carpark In-ground Services, QLD



WATER & WASTEWATER

Shamrock Civil Engineering has over 25 years experience delivering stormwater, water and sewer reticulation systems and stabilisation works.

We have delivered RCP ranging from 375mm to 2,100mm in diameter, culvert structures up to 2,400mm in height and water and sewer pipelines up to 2,600m in length.

Shamrock Civil Engineering respects the environment, leaving a minimal footprint or impact to surroundings, whilst completing projects.

Shamrock Civil was engaged by Richmond Valley Council to undertake embankment stabilisation works on Ocean Drive, Evans Head, NSW.

The works were adjacent to the Evans River foreshore and were completed ahead of schedule and without any harm to the neighbouring waterway.

The works were completed to a high standard and received many compliments from the community.

Shamrock Civil was active in finding solutions for any hiccups which were encountered during the project.

Council looks forward to working with Shamrock Civil in the future.

Richmond Valley Council

KEY WATER & WASTEWATER PROJECTS:

- Forest Glen Master Drainage Browns Plains, QLD
- Battlefield Airlifter Early Works Services
 Diversion, QLD
- Urban South Aerial Weapons Range Roads
 Civil & Infrastructure, NSW
- RNA Detention Tank Stormwater, QLD
- Arlington St Master Drainage Underwood, QLD
- Ocean Drive Slope Stabilisation, NSW
- Sarina Waste Transfer Station, QLD
- Brisbane Street Watermain Replacement, QLD
- BAC International Airport Culvert Works, QLD
- Gold Coast Rapid Transit Stormwater Drainage,
 QLD
- Brisbane Airport Multi-Level Carpark In-ground Services, QLD
- Renee St & Waller Rd Stormwater Upgrade, QLD
- Lady Cilento QLD Children's Hospital, QLD
- Amberley Sewer Pit & GPT, QLD
- Holts Road Stormwater Culvert Upgrade, QLD

Capability encompassing expertise in stormwater, water and sewer reticulation systems and stabilisation works.



BUILDING

Shamrock Civil Engineering has over 25 years experience delivering civil works for tier 1 builders including:

- ADCO Constructions
- Hutchinson Builders
- John Holland
- Laing O'Rourke
- Lend Lease
- Watpac Australia

Through delivering these projects Shamrock Civil has gained a sound knowledge and understanding of working in Hospital, Shopping Centre, School, Commercial and Correctional Zones. We place stringent controls on the management of noise and dust pollution, minimising impacts on daily operations while ensuring minimal impact on access requirements for vehicles. We maintain adequate and safe pedestrian access, regular communications, recognition and understanding of security protocols.

KEY COMMERCIAL PROJECTS:

- Southpoint Stage B- Southbank Earthworks, QLD
- Tribune on Grey Building Earthworks, QLD
- Matisse Tower Basement Excavation, QLD
- QLD Cultural Centre Millennium Arts Bulk Excavation, QLD

KEY CORRECTIONAL PROJECTS:

- New Youth Detention Centre Bulk Civil Works, QLD
- Gatton Correctional Facility Civil Works, QLD
- Arthur Gorrie Correctional Centre & Brisbane Reception
 Centre Upgrade Civil Works, QLD

KEY HEALTH PROJECTS:

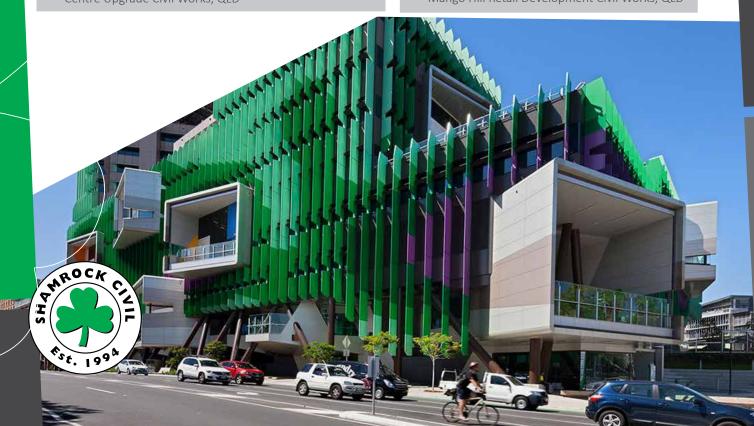
- Herston Specialists Rehabilitation & Ambulatory Care, QLD
- St Andrew's Ipswich Private Hospital Carpark, QLD
- Logan Hospital Intersection Upgrade, QLD
- Gold Coast Private Hospital Carpark, QLD
- The Qld Children's Hospital Civil Works, QLD
- Mackay Base Hospital Stage 3 Carpark, QLD
- Logan Hospital Carpark Reconfiguration, QLD

KEY EDUCATIONAL PROJECTS:

- Springwood Road State School Drainage, QLD
- Collingwood Park State School Civil Works, QLD
- West Pacific Pines State School Civil Works, QLD
- Brisbane Boy's College Civil & Road Works, QLD
- ACLLL Springfield University Carparks & Roadworks, QLD
- AIBN University of QLD Civil Works, QLD

KEY RETAIL PROJECTS:

- Townsville Reef HQ Office Demolition, QLD
- Heathwood Woolworth Distribution Centre, QLD
- Costco Ipswich Civil Works, QLD
- Toowoomba Grand Central Water & Sewer, QLD
- Robina Town Centre Carpark & Stormwater, QLD
- Indooroopilly Shopping Centre Intersections, QLD
- Ipswich Riverlinks Shopping Centre External Roads, QLD
- Mango Hill Retail Development Civil Works, QLD



Why WORK WITH US

Shamrock Civil is committed to delivering excellence in civil construction by focusing on the key business practices such as health, safety, environmental and quality. Our third-party certified management systems have evolved to meet the new challenges associated with the increased complexity and value of projects we undertake.



The safety of our people is our number one value. We ensure our initiatives are linked to comply with the Work Health and Safety Act (2011) and stand by the mantra that there is no task so important that it compromises the safety of an individual. Our strong health and safety culture can be attributed to our Safety for Life initiative, which focuses on a Zero Harm culture and providing a supportive working environment for our employees, subcontractors and partners.

Shamrock Civil's Workplace, Health & Safety system complies with the requirements of ISO 45001, is third party certified and has also achieved Federal Safety Accreditation.



ENVIRONMENT

Shamrock Civil is committed to understanding, meeting and continuously evolving our approach to environmental management. Our Environmental Management System has been developed to reduce the impact our operations have on all aspects of the environment, including native flora and fauna, air and water quality, soil conditions and cultural heritage. We implement practices that significantly reduce our impact, whilst continuously developing these practices to improve our environmental performance.

Shamrock Civil's Environmental system is third party certified by SAI Global and complies with the requirements of ISO 14001



We are taking steps to continually improve the mental and physical health of our workforce, which has the potential to deliver significant productivity benefits to our employees and the industry.

We have implemented a dynamic health program, helping to create safer work attitudes and encouraging behavioural change through recognising the links between health and safety at work and at home.



QUALITY

Shamrock Civil is constantly striving to improve our products and services for the benefit of our clients and the betterment of our business. Our multi-faceted Quality Management System includes a detailed analysis of client demands prior to the commencement of operation and stringent quality control procedures during construction. We assess all products and services to ensure conformance to the requirements of each project's specifications, drawings and relevant standards.

Shamrock Civil's Quality Management System complies with the requirements of ICO 0001 and is third party













Shamrock GIVING BACK



COMMUNITY ENGAGEMENT

Shamrock Civil Engineering is committed to leaving a legacy in the communities in which it operates. The company is keen on assisting local communities through infrastructure, employment and training.

Shamrock Civil Engineering provides support to a range of community based groups and partnerships including charity golf days, educational programs, sporting teams, charitable programs and key infrastructure to organisations across the country.



LOCAL PARTICIPATION

Shamrock Civil Engineering is committed to the principles of sustainable development of Small and Medium Enterprise businesses within the local geographical footprints of our operations to enhance the socioeconomic sustainability of the local communities.

Shamrock Civil Engineering is committed to providing early communication to the local business community to allow interested parties to maximise their supply delivery opportunities with Shamrock Civil Engineering in their local region.

We approach each project individually, actively identifying opportunities for local community engagement and participation. This enables beneficial outcomes for the project team, client and local community.



INDIGENOUS

Shamrock Civil Engineering is committed to improving the social and economic welfare of Indigenous people by providing opportunities for employment, promoting career development, and providing a culturally sensitive workplace.

In May 2017, Shamrock Civil Engineering announced its partnership with Waanyi Aboriginal Corporation, an indigenous company based in North Queensland. The joint venture was registered as Waanyi Shamrock United, known commercially as WSU Civil.

WSU Civil recognise the importance of providing real opportunities to Indigenous communities, to assist in raising their economic and social development, which ultimately improves their standards of living and associated health and well-being status.

This has been a long standing approach to each of our business operations and this partnership now strengthens that position. We provide services to the civil construction industry, while offering local indigenous communities the opportunity to take part in wealth-generating activities on traditional lands.

Shamrock Civil Engineering's continued focus is on increasing our commitment to Indigenous engagement across the company and to create a diverse workforce. We have extensive experience working in regional and remote areas and within Aboriginal and Torres Strait Islander communities. Our policies, plans, initiatives and training programs support our commitment to provide equal opportunities.







RELEVANT EXPERIENCE



FRASER & DEALS ROADS LANDFILL REHABILITATION

Location

Clayton South, Melbourne VIC

Client

Cleanaway Solid Waste Pty Ltd

Commencement Date

December 2018

Completion Date

September 2021

Contract Value

\$27.5M







Overview

Rehabilitation of Fraser Rd and Deals Rd Landfill including bulk earthworks, supply and placement of clay foundation layer, supply and placement of geosynthetic lining system, supply and placement of subsoils, topsoil and revegetation. Ancillary works included the construction of two attenuation ponds including associated stormwater infrastructure and connecting to council infrastructure.

Scope of Works

- Bulk earthworks (cut/fill waste) 250 000m3
- Clay foundation layer 135 000m3
- Geosynthetic lining GCL, LLDPE, cushion 1 350 000m2
- Subsoils 225 000m3
- Topsoil 90 000m3
- Revegetation 450 000m2
- Low perm clay 82 500m3
- 675mm Dia RCRRJ concrete stormwater pipes 355m
- 750mm Dia HDPE stormwater pipe 411m
- Hardstand roadbase 45 000m3
- Onsite traffic management

Achievements

The site is bounded by the local council nature reserve, the local community golf course, a go kart/motorbike track and several main roads. Regular communications with interested parties saw any issues being resolved swiftly and without any consequences. No major incidents were reported on the project.





SUN METALS SOLAR FARM - CIVIL WORKS

Location

Townsville QLD

Client

RCR O'Donnell Griffin

Commencement Date

August 2017

Completion Date

January 2018

Contract Value

\$4.1M







Overview

Shamrock Civil Engineering was engaged by RCR O'Donnell Griffin to carry out bulk earthworks for the establishment of a 116 MW solar power plant to the Sun Metals zinc refinery in Townsville. The solar farm will cover up to 120 hectares of land and will be connected into Sun Metals existing 33/132kV substation.

Scope of Works

- Stripping of vegetation on site which was a disused mango farm
- Leveling and rolling of 140,000m2 site
- Filling and compaction of three dams
- Demolition of 1.67km of existing construction road to the site
- Forming of the Solar Array earthworks including spreading of 80,000m3 spoil mound, screening and stock piling of 20,000m3 of spoil material and re-working 47,000m3 of old quarry ground levels
- Construction of 7km of unsealed access roads to enable construction of the array structures
- Construction of footings for the support structures, including bored piers
- Removal and disconnection of redundant water main

Achievements

Shamrock Civil Engineering successfully completed the project with zero LTI's recorded.





QGC NORTHERN WATERS TREATMENT PLANT WATER & SEDIMENT PONDS

Location

Woleebee QLD

Client

Laing O'Rourke

Commencement Date

February 2013

Completion Date

September 2013

Contract Value

\$36M







Overview

Shamrock Civil Engineering was contracted to undertake the construction of the sediment ponds within the Northern Waters Treatment Plant. The plant treats water from QGC's northern coal seam gas fields using advanced water treatment technologies with 97 per cent of the water recovered and beneficially reused by the local community and farmers.

Scope of Works

- Site clearing and grubbing of 340,000m2
- Topsoil stripping and stockpiling of 50,000m3
- Subgrade preparation of 460,000m2 including tyne, condition and compacting natural surface under fill areas and exposed cut areas to 200mm depth
- Ripping, loading and hauling of 300,000m3 of sandy clay material to embankments
- Cutting and carting of 90,000m3 of material from borrow areas and stockpiles
- Spreading and compaction of 400,000m3 of cut material on embankment and 38,000m3 of clay layered floor to 125mm
- Construction of temporary access roads including excavation of spoil and clay for reuse, final trimming, placement of gravel rods along crest of walls
- Final trimming of 375,000m2 internal pond area including soil conditioning and final trimming of 80,000m2 external batters of bunds
- Supply and installation of piezometers
- Installation of 134m of 100mm dia uPVC outlet pipes for underliner drainage

Achievements

The project achieved an outstanding safety record, with over 350,000 man hours LTI free.





TOWNSVILLE FIELD TRAINING AREA (TFTA) 3 YEAR ROAD WORKS (YEAR 1 & 2)

Location

Townsville Field Training Area, QLD

Client

Aurecon (DoD)

Commencement Date

June 2020

Completion Date

June 2021

Contract Value

\$8.3M







Overview

Shamrock Civil were awarded the project to deliver road maintenance and upgrades within Piccadilly Sector to the primary (Piccadilly Road) and secondary roads (Jacks Road and Unnamed Road) within Townsville Field Training Area.

Upon completion of these works Shamrock Civil were awarded variation road maintenance works in the Northern Sector to the Super Highway and Kiery's Road (combined 25km) and Star Road (10km).

Scope of Works

- UXO Investigation and Clearance
- Environmental Management & vegetation clearing
- Bulk excavate surplus material to spoil of 2000t. Bulk fill scoured out areas
 of 1500t
- Gravel Supply/Top up, Light, Medium & Heavy formation grading
- Placement average 150mm layer of 2.5 gravel material on 36km unsealed road (40,000t of gravel)
- Reshape table drains
- Cement Stabilise cutoff walls and floodways
- Reconstruct existing Rock Check Dam
- Repair existing signs, replace guide posts/markers and install new signs
- Installation of around 650 rock check dams. Construction of drains of a total length 124km
- Rock protection (200mm and 500mm)
- Replace head/end wall

Achievements

Shamrock Civil successfully delivered this project on time and within budget. We reached 86,400 hours lost time injury (LTI) free, and with nil environmental incidents.

Shamrock Civil successfully manufactured all quarry materials required from the sources available at Mount St Michael Quarry within TFTA preventing the necessity to import materials and therefore negating the risk of weed introduction to TFTA.





NACKEROO AIRFIELD UPGRADE - CIVIL WORKS

Location

Timber Creek, NT

Client

Sitzler

Commencement Date

June 2022

Completion Date

October 2023

Contract Value

\$32.5M







Overview

Shamrock Civil Engineering (SCE) was engaged to complete the civil scope of works package in the construction of an airstrip at the Bradshaw Field Training Area.

These works are all focused at the Nackeroo Airfield Strip; originally a 1.5km long airstrip that is being extended and upgraded to provide a fit for purpose landing strip for C17 Globemasters' & a V-22 Osprey Tiltrotor Aircrafts'.

Scope of Works

The work consists of:

- · Land clearing in conjunction with local and external stakeholders
- Earthworks cut to fill of 50,000m3
- Construction of subbase pavement totalling 46,000m3
- Fine crushed rock paving totalling 12,500m3
- Spray sealing of pavement totalling 100,000m2
- Finishing works involving installation of airfield furniture, line marking, landscaping & fencing works
- Stormwater, involving a total of 4km of swale installation, culvert lines, rock lined drain installation, and floodways
- Onsite production of 110,000t of subbase material and 100,000t of General fill to complete airstrip

Shamrock have also been engaged to facilitate the completions HOTO/CHOTO of the airstrip, ensuring an expedient product is delivered to the client.

Achievements

- Establishment of an on-site quarry managing to provide significant cost savings and value to the client, through strategic and effective management of quarry operations.
- Lessons learnt from previous scope of works at the Bradshaw Field Training Area brought forward to continue the high-performance culture that has been previously set.





MELBOURNE REGIONAL LANDFILL (MRL) CELL 4B1 & 4B3

Location

Ravenhall, VIC

Client

Cleanaway Solid Waste Pty Ltd

Commencement Date

August 2018

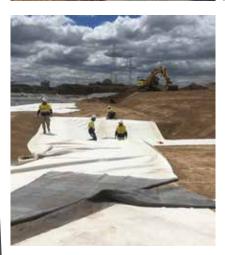
Completion Date

June 2019

Contract Value

\$8M





Overview

Shamrock Civil Engineering was awarded the construction of Cell 4B1 & 4B3 at Melbourne Regional Landfill for Cleanaway Solid Waste Pty Ltd. Cell 4B 1 & 3 involved the construction of a new landfill cell adjacent to the existing operating landfill facility in Ravenhall, Melbourne.

Scope of Works

- 30,000m3 subgrade excavation and 70,000m3 subgrade filling
- Placement of 60,000m3 compacted clay liner
- Installation of geosynthetic lining system including 100,000m2 of Geosynthetic Clay Liner (GCL); 100,000m2 of HDPE Geomembrane; 200,000m2 Protection Geotextile (Cushion) and 100,000m2 Separation Geotextile. Reinforcing on Batters. Protective drainage soils on batters
- Supply and installation of Leachate Collection System including 3,000 lm of pipe and sump risers 110mm/160mm dia, 50lm of 450mm diameter pipe, 10,000m3 of protection soils
- Installation of 30,000 m3 of drainage aggregate

Achievements

At the request of Cleanaway, Shamrock Civil accelerated the construction program multiple times, with tight deadlines successfully met.

We provided works and services in other areas of the site to assist operations and help improve the site.

Shamrock Civil successfully delivered this project with zero LTIs.





PACIFIC HWY UPGRADE, WOOLGOOLGA TO BALLINA – ANCILLARY SITE COMPOUNDS

Location

Between Ballina & Woolgoolga, NSW

Client

Pacific Complete (RMS)

Commencement Date

November 2016

Completion Date

April 2021

Contract Value

\$30M





Overview

Shamrock Civil Engineering was awarded the contract for the design and construct of the Principal's project accommodation on the Pacific Highway Upgrade – Woolgoolga to Ballina Project. The accommodation was located on a number of ancillary site's that were identified along the 155km section of the Pacific Highway.

Scope of Works

- Detailed design of all elements of Pacific Complete's major ancillary site compounds
- Access roads and enabling works into the site compounds (from the Pacific Highway)
- Clearing and grubbing
- Earthworks and hardstand pad design and construction
- Drainage and levels
- All necessary underground/ overhead services (including the design and construction of mains power delivery, sewer and water where applicable).
- Design, supply and installation of full scale temporary buildings, including:
 office buildings, crib facilities, toilets, meeting rooms and training rooms.
- Removal, demolition and rehabilitation of each site compound, upon conclusion of the main contact works on the Pacific Highway







CULTANA TRAINING AREA 3 YEAR ROAD WORKS

Location

Whyalla SA

Client

Department of Defence (Aurecon)

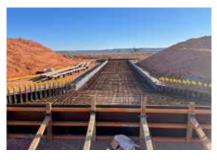
Commencement Date February 2021

Completion Date

July 2022

Contract Value

\$10.5M





Overview

The primary scope of work for the Cultana Training Area Roadworks project is road (11.5km) and drainage/culvert construction to ensure a fit for purpose structure.

The site is situated in the Australian Army Cultana Training Area adjacent to Lincoln Highway and Port Bonython Road, Whyalla SA.

Scope of Works

- UXO and cultural heritage site inspection
- Clearing and grubbing, stripping of seedbank (top 30mm) and stripping of topsoil
- Surface preparation for acceptance of general fill
- SCE quarried general fill on-site and placed to design specifications under own supervision
- Import & place pavement materials 150mm subbase & 150mm wearing course
- Construct 20 RCBC Culvert Crossings with custom headwalls, apron slabs and rock protection
- Construct swale drain parallel to new road approx. 1.65km with rock protection at outlets
- Street furniture, fencing etc

Achievements

Shamrock Civil delivered this project achieving 'zero harm' relating to health, safety and environment. The completion of this project exceeded the contract schedule requirements in a timely manner without negatively impacting on the operation of the Defence facilities or neighboring properties or affecting Defence capabilities. Shamrock Civil engaged local contractors and resources from the Eyre Peninsula, which met our minimum 50% local participation target.





VICTORY ROAD CELL 4B (PHASE 2)

Location

Clarinda, VIC

Client

Transpacific / Cleanaway

Commencement Date

June 2015

Completion Date

December 2016

Contract Value

\$11.8M







Overview

Shamrock Civil were contracted by Cleanaway to construct Cell 4B at Victory Road Landfill. This project was on a brownfield site, with the base of the cell several metres below the water table, with ground conditions that required careful management and planning. The staging was also complex, with Cell 4B being split into 3 separate portions, which were constructed at different times. This staging was to facilitate transferring existing solid-inert waste from one cell embankment, to the newly constructed sections. Each cell comprised of a groundwater depressurisation system, a 1m thick compacted clay liner and a dedicated leachate collection system.

Scope of Works

- Subgrade reshaping
- Construction of a ground water collection system, 1m thick compacted clay liner and a leachate collection system with separation geotextiles
- Temporary dewatering
- Haul roads and ramps
- Slimes drying pan management and ground improvement measures

Achievements

Due to the instability of the ground conditions Shamrock were required to construct a bridging layer, to create a suitable subgrade. The bridging layer constituted multiple layers of woven and non-woven geofabrics and varying sizes of rock placed in layers, to bridge the slimes material in the bottom of the cell. These works were carried out on a live landfill site, with several interfaces with the client's own operations. Due to outstanding performance, Shamrock Civil were awarded the construction of an additional access road into the site. A total of 93,538 hours were worked with no LTI's. A notable achievement, given the complex nature of the site and interaction with other contractors and the public.





TRANSPORT INFRASTRUCTURE REPAIRS AND RENOVATIONS, MANUS ISLAND

Location

Manus Province, PNG

Client

PNG-AUS Transport Sector Support Program

Commencement Date

December 2014

Completion Date

November 2016

Contract Value





Scope of Works

Overview

The scope of works involved earthworks, pavement, stormwater drainage works, bitumen sealing works and construction of road furniture, kerb and channel to the following locations:

Lorengau Market Place roads

tropical conditions and high rainfall.

- Lorengau to Momote road repairs
- Sea Inundation (raise sections of roadway and improve sea

Shamrock Civil Engineering was engaged by Papua New Guinea-

infrastructure repair works in Manus Province, PNG.

Australia Transport Sector Support Program (TSSP) to provide transport

Construction works were located in a remote area, with challenging

Paint and repair Loniu and Nuwok Bridges

Achievements

Shamrock Civil Engineering were commended on their successful delivery of this project. This project was delivered with no environmental impacts, on time and within budget.







REEF HQ OFFICE DEMOLITION

Location

Townsville, QLD

Client

Great Barrier Reef Marine Park Authority

Commencement Date

July 2021

Completion Date

November 2021

Contract Value

\$2.4M





The project was completed on time and within budget. As the project was adjacent to the creek's edge there was a spotlight on the possible environmental impacts the project could have. Erosion and sediment control was managed in the form of scaffold fitted with spidermesh to prevent contamination of the creek. The project was completed without environment incident. Stakeholders such as private residents and business in the area were informed of the works prior to commencement – works were completed without complaint and to the satisfaction of all stakeholders.





Overview

Shamrock Civil was awarded the project to conduct demolition works at Reef HQ, a set of three buildings which had been vacant for several years. The buildings were subject to water damage, and with no sunlight exposure and minimal airflow, had extensive mould growth throughout the buildings. The buildings were unsuitable for use and marked for demolition.

Scope of Works

The demolition works consisted of the following:

- Decommissioning of existing fire panel within the Reef Wonderland Building and relocation of electrical access
- Mould remediation to three separate buildings, including 3 storey office building, cultural centre and IMAX theatre
- Erection of hoarding scaffold to the perimeter of the works site.
- Traffic management on public roads
- Vibration monitoring to adjacent structures
- Safe demolition of all structures to slab level
- Installation of semi-permanent hoarding fence with vehicle access gates and pedestrian access gates





CONTACT INFORMATION

ADELAIDE

- **&** 08 8244 2335
- adelaideadmin@shamrockcivil.com.au
- 9 163 Francis Road, Wingfield SA 5013

DARWIN

- 08 8947 1424
- estimating@shamrockcivil.com.au
- Building 3, Level 2, 631 Stuart Highway, Berrimah NT 0828

ROCKHAMPTON

- 07 4922 7012
- **⋈** estimating@shamrockcivil.com.au
- Ground Floor Suite 2, 130 Victoria Parade, Rockhampton QLD 4700

BRISBANE

- **Q** 07 3727 1100
- estimating@shamrockcivil.com.au
- 9 195 Cobalt Street, Carole Park QLD 4300

MELBOURNE

- **Q** 03 9543 4511
- Maria melbourneadmin@shamrockcivil.com.au
- Suite 4 Building 25, 270 Ferntree Gully Road, Notting Hill VIC 3168

TOWNSVILLE

- 07 4417 1600
- townsvilleadmin@shamrockcivil.com.au
- 646 Ingham Road, Mount Louisa QLD 4814