

# Capability Statement

18 Dec 2017

# LAND SURVEYS NO PROBLEMS JUST SOLUTIONS PTY LTD



## INDUSTRIES SERVED

DEFENCE

CONSTRUCTION &  
ENGINEERING

LAND &  
AGRICULTURE

RAIL

STEEL

PROFESSIONAL  
SERVICES

MINING

OIL, GAS & ENERGY

TRANSPORT

WATER

## Company Details

**Address:** 19 Brennan Way  
BELMONT WA, 6104 Australia

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**Fax:** +61 8 9477 4499

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**Email:** admin@landsurveys.net.au

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**Web:** www.landsurveys.net.au

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**ICN Gateway Company ID:** 90123

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**Employees:** 175

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**ABN:** 15 121 941 277

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**Locations:** 7

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**Local Manufacturer:** No

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**Foreign Manufacturer:** No

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**Importer:** No

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**Exporter:** No

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**NT CAL Accredited:** No

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**Works in Remote Locations:** Yes

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**Australian Indigenous Owned:** No

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## Contacts

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Innovation is a key focus for Land Surveys in the major projects market.

## Summary

Land Surveys provides full surveying services specialising in Resources, Infrastructure, Commercial Construction, Land Development and 3D Mapping and Modelling. Land Surveys has offices around Australia; Karratha, Port Hedland, Darwin, Mackay, Brisbane, Sydney, Melbourne and its head office based in Perth.

Innovation is a key focus for Land Surveys in the major projects market. The company developed a streamlined, innovative model for reporting volume progress on bulk earthworks using the latest 3D scanning technology, UAV

captured data and electronic capture of field data. Land Surveys is a major contributor to productivity improvement on major project sites.

With over 220 professional and committed staff, Land Surveys provides full surveying services specialising in Aerial Surveys, Engineering Surveys, Hydrographic Surveys, Land Development, Laser Scanning, Mine Surveying and Spatial Data Management and Analysis.

## Description

Innovation is a key focus for Land Surveys in the major projects market. The company developed a streamlined, innovative model for reporting volume progress on bulk earthworks using the latest 3D scanning technology, UAV captured data and electronic capture of field data. Land Surveys is a major contributor to productivity improvement on major project sites.

With over 200 professional and committed staff, Land Surveys provides full surveying services specialising in Resources, Infrastructure, Commercial construction, Land Development and 3D Mapping and Modelling.

Utilising the latest technology available, Land Surveys provides professional services that allow us to deliver innovative solutions for our client's survey requirements. Working closely with our client's we are able to streamline mining, construction and development techniques to achieve high quality results and help ensure projects are completed ahead of time and within budget and that the client get the data that they need in a format that they can use as the deliverables are the most important item as that is what the client requires.

Being a large company with a stable work force we can provide surveyors for projects from topographical pickups, earthworks set out and volume control and reports, minor

design assistance to engineers, SMP works, road and major infrastructures including civil concrete and structural steel. We specialise in material handling systems conveyors, cranes, ship loaders and stacker reclaimers including fault finding assistance in regards alignment and elevation tolerances. We have been involved in the construction of marine works and have been called in to undertake a audit survey on contract surveyors to ascertain accuracy of work. We have a hydrographical division that can undertake surveys of water bodies to assist with water management and water holding capacity calculations. Our latest operational division includes UAS (drones) which allow us to undertake accurate mapping at low altitudes which gives a quick turn around with deliverables being a cloud based data sort, a contour plan with volumes (if required) and a aerial photographic mosaic of the area which is great for planning purposes and this can all be achieved in a very short turn around. This division is also responsible for our scanning be it long range Riegel for earthworks and mining or short range accurate scans for plant and equipment. The modelling is undertaken at our Perth Head Office and is customised to the clients requirements.

As a survey company we realise that we are now becoming the custodians of the clients data and as such have ensured that we have the right systems and procedures in place to safe guard the data and ensure that it is factual and

accurate. We have undergone strict third party accreditation or quality, environmental and health and safety.

Having worked with the majority of the larger companies in Australia we have had an excellent track record and have maintained our commitment to quality work and an

affordable price realising that we are here for the long haul to supply a service to the nation.

When you next consider your survey supplier, contact the Land Surveys team. We will take the time to understand your project and provide a customised survey solution.

## Associations

- > Project Connect
- > e-Pilbara Capability Register
- > Supplybase VRS
- > Chamber of Commerce & Industry of WA (CCIWA)
- > Karratha and Districts Chamber of Commerce & Industry (KDCCI)
- > Master Builders Association of WA
- > Surveying and Spatial Sciences Institute of Western Australia (SSSIWA)
- > Association of Professional Engineers, Scientists & Managers, Australia (APESMA)
- > Survey Board of Queensland
- > MAIN Qld
- > Austmine

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## Accreditations

- > ISO9001
- > AS4801

## Industries Served

- > Defence
- > Construction & Engineering
- > Land & Agriculture
- > Rail
- > Steel
- > Professional Services
- > Mining
- > Oil, Gas & Energy
- > Transport
- > Water

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## Products & Services

- > Aerial Surveys and Spatial Data Management & Analysis
- > Engineering Surveys
- > Hydrographic Surveys
- > Land Development
- > Laser Scanning
- > Mine Surveying

## Major Clients

- > AGC
- > Angall
- > Bechtel
- > BGC Contracting
- > BHP Billiton Mitsubishi Alliance (BMA)
- > BMD Constructions
- > Brookfield Multiplex
- > CB&I
- > Civmec Construction and Engineering
- > CPB - CIMIC
- > Decmil Australia
- > Ensham Resources
- > FMG
- > Gallagher Group
- > John Holland Group
- > Liang O'Rourke
- > Land Corp
- > Lend Lease
- > Monadelphous Group
- > Pilbara Ports Authority
- > Pindan
- > Probuild
- > Psaros
- > Rio Tinto
- > RJ Vincent
- > Salta Constructions
- > United Group Resources
- > VDM Construction
- > Water Corp

## Facilities

- > Land Surveys head office is in Perth with regional offices in Karratha, Port Hedland, Darwin, Brisbane, Melbourne, Sydney and Port Moresby
- > We currently have 107 Fleet Vehicles including 80 with mine requirement specification and 10 which are fitted with IVMS systems for our oil and gas projects. All our vehicles are less than 3 years old and are Toyota Hilux 4x4 DC and Volkswagen Amarok being regularly maintained through the respective agents.
- > Land Surveys operate mainly Leica Viva systems, both GPS and TPS types. We also have Trimble and Topcon systems where this is preferred by the client
- > Our current stock holding are :-
  - > 73 Leica Geosystems Robotic Total Stations (TPS)
  - > 14 Trimble Total Stations (TPS)
  - > 27 Leica Laser Traverse Kits
  - > 54 Leica Optical Traverse Kits
  - > 78 Leica Controllers
  - > 10 Topcon Controllers
  - > 19 Trimble Controllers
  - > 80 Leica Geosystems GPS systems
  - > 14 Trimble Geosystems GPS systems
  - > 8 Topcon GPS systems
  - > 20 GPS Repeaters
  - > 44 Leica Digital level systems
  - > 45 of 12d Software licences
  - > 45 Liscad Software licences.
  - > 3 Best Fit Software licences.
  - > 4 Terramodel Software licences
  - > 3 UX5 System UAVs
  - > 2 X100 System UAVs
  - > 2 Riegel VZ1000 long range scanner
  - > 3 Ferro Focus 3D scanners

## Previous Significant Projects

2017

**Gold Road Exploration Works – Gruyere**  
**\$100,000,000**

**Client: Gold Road Resources Ltd**

Several exploration and initialisation works such as setting up a project grid, survey of mining lease, control surveys, UAV, aerial surveys, Setting out of SMPE&I infrastructure and general exploration works aimed at the production of mineral resource.

2017

**Pilbara Minerals Pilgangoora**  
**\$200,000,000**

**Client: Pilbara Minerals**

In Partnership with Njamal services, Land Surveys have been providing on-going survey support to the ownership team at Pilgangoora.

2016

**Day Street, NSW**  
**\$40,000,000**

**Client: Hamilton Marino**

Residential development

2016

**Ichthys Combined Cycle Power Plant**  
**\$900,000,000**

**Client: UGL BGC Contracting**

\* Installation stick-built steel structures \* Installation of mechanical equipment (vessels, columns, internals & externals, packaged equipment etc.) \* Installation of stick-built piping including free issue prefabricated spools \* Hook-up and tie-in of modules and piping systems \* NDT and pressure testing \* Assistance with heavy lifting work such as preparing foundations, alignment & grouting \* Pre-commissioning \* Equipment preservation

2017

**Jimblebar Expansion Project**  
**\$150,000,000**

**Client: Sedgman Civec Joint Venture**

A joint venture between Civec and Sedgeman worth \$145M, Land Surveys were responsible for the survey, setting-out and dimensional co-ordination for the installation of new primary crusher, ore conveyors and other related infrastructure.

2016

**Collins Wharf, Melbourne**  
**\$200,000**

**Client: Lend Lease**

Installation of an integrated automated monitoring system, comprising In-Place Inclinometers (IPI's) to measure ground movement, together with an Automated Total Station to measure movement of a wharf and sea wall during the major piling works.

Data was streamed in near real time to the central monitoring database where alerts and movement were able to be assessed by all consultants and decisions made quickly.

2016

**Early Works Greenland Centre, NSW**  
**\$300,000,000**

**Client: Brookfield Multiplex**

Greenland Centre apartment tower on Bathurst Street in the Sydney central business district. The landmark project will be Sydney's tallest residential tower when completed, standing 235m high.

2016

**Ichthys LNG Project CVL-3 Package, NT  
\$900,000,000**

**Client: Leighton Contractors**

Leighton Contractors were engaged to complete the major civil works package (CVL-3) at Inpex's Ichthys Onshore LNG Facilities. Land Surveys were contracted to supply a variety of surveying and spatial solutions which necessitated the use of a wide range of equipment in order to produce the desired results and associated deliverables.

2016

**Ichthys LNG Project MEC-1 Package, NT  
\$900,000,000**

**Client: UGL Kentz JV**

The Ichthys LNG Project, one of the world's largest LNG developments, involves gas from the Ichthys Field in the Browse Basin off north-west Australia being exported to the onshore processing facilities in Darwin via a 889km pipeline. The MEC-1 package includes the provision of services involving project management, minor procurement, construction, pre-commissioning and commissioning support for installation of the two LNG Process Trains and the Inlet Facilities

2016

**Level Crossing Removal Package - North,  
McKinnon & Centre Roads, Victoria  
\$500,000,000**

**Client: John Holland**

Land Surveys provided 24 hour survey data management and field survey services to enable excavation of the rail corridor, lowering of the rails below the road and construction of new stations over a 37 day period to completion the project.

Survey data management was key as all set-out data needed to be calculated from PDF design plans as required, and provided to the surveyors without delay. Surveyors had to interface and service all components of the project.

2016

**Ichthys LNG Plant - UAV, NT  
\$900,000,000**

**Client: Leighton Contractors**

To complement the construction process Land Surveys are providing regular aerial surveys of site. These aerial surveys are conducted with a Gatewing Unmanned Aerial Vehicle (UAV). Covering up to 5sq kms a day, the UAV provides a quick and cost effective solution for capturing aerial photography and spatial data and spatial data for the site. The data outputs provide accurate spatial information and imagery for the site that can be used for a range of purposes such as situational awareness

2016

**Level Crossing Removal Package - Caulfield to  
Dandenong, Victoria  
\$1,500,000,000**

**Client: Lend Lease / CPB JV**

The Level Crossing Removal Project: Caulfield to Dandenong involves removing 9 of Melbourne's busiest level crossings, rebuilding 5 stations, constructing an elevated 'skyrail' to remove the level crossing as well as building an additional 5 new stations.

Land Surveys was engaged by the client to provide overall survey support using the latest technologies in conventional survey, GNSS, laser scanning and monitoring. Land Surveys currently have 10 surveyors working on this project.

2016

**Sunshine Coast University Hospital, QLD  
\$2,000,000,000**

**Client: Lend Lease**

Sunshine Coast Public University Hospital will be a tertiary teaching hospital, servicing the Sunshine Coast region, as the hub in an integrated network of accessible healthcare. Once complete in late 2016, Sunshine Coast Public University Hospital will open with about 450 beds in 2016, growing to a 738 bed facility by 2021. Land Surveys has deployed 5 surveyors to the site and are in charge of the Site Wide Survey functions and data management.



**2016**

**Wheatstone LNG Storage and Condensate Tanks, WA**  
**\$500,000,000**

**Client: EVT JV**

EVT JV, a joint venture between EV LNG Australia and Thiess, was awarded a contract to build LNG storage and condensate tanks at Chevron's Wheatstone LNG Project. EVT JV are responsible for the engineering, procurement and construction of two 150,000m<sup>3</sup> LNG storage tanks, including all piling, civil and mechanical works, and also for all mechanical works for the erection of two 120,000m<sup>3</sup> field erected condensate tanks.

**2015**

**New Perth Stadium**  
**\$1,000,000,000**

**Client: Cvmec**

Land Surveys is currently proving surveyors to Cvmec at the New Perth Stadium Site which will have a seating capacity of 60,000. The Steel Package consists of the supply and installation of more than 14,000 tonnes of structural steel used for the five level stadium superstructure.

In addition to the Steel Structural Package, Land Surveys will also be providing survey services to Cvmec for the installation of approximately 5,300 tonnes of precast concrete units.

**2015**

**Perth Library, WA**  
**\$30,000,000**

**Client: Doric Group**

Land Surveys was appointed the project surveyor in July 2013 for all survey works on this project. The complex circular design was incorporated between other operating sites including St Georges Cathedral, 565 Hay Street and the Old Treasury Buildings and so is an extremely constrained site.

**2015**

**Elizabeth Quays Redevelopment, WA**  
**\$200,000,000**

**Client: Leighton Contractors**

The scope of works of this project is to completely redevelop the Barrack Square precinct of Elizabeth Quay. Land Surveys are providing valuable service location data management along with the general set-out of any concrete and civil works in Barrack Square.

**2015**

**Futra Apartments, NSW**  
**\$30,000,000**

**Client: Hamilton Marino**

Highrise residential apartment block, 54 Studio, 1, 2 or 3 bedroom apartments.

**2015**

**Nova Nickel Project**  
**\$400,000,000**

**Client: RJ Vincent**

Land Surveys provided up to 3 teams on site daily to undertake the following: \* Establishing Survey Control between the Eyre Highway and the Project Site \* Bulk Earthworks setout for cut & fill \* Final Trim surveys for the Airstrip and Haul Road \* Conformance Surveys and Reporting \* Managing Trimble, Leica and Topcon Machine Guidance Systems \* Redesign work in 12d for the road formation during the road construction \* UAV End of Month Volumetric Surveys for Monthly Claims

2015

**Yandi Sustaining Project, WA**  
**\$100,000,000**

**Client: Civmec**

Civmec were awarded a SMP contract at Rio Tinto's Yandi Sustaining Project comprising of supply, fabrication, modular assembly and SMP site works for the Junction South East Wet Plant facility. Construction for the SMP phase included structures such as scrubbing, screening, classification, surge bin, transfer stations and associated conveyors. Land Surveys have supplied 3 survey crews to provide surveying services for this project.

2014

**Howard Springs Accommodation**  
**\$300,000,000**

**Client: Laing O'Rourke**

Laing O'Rourke were awarded the contract to construct the 3,500 man Accommodation Village for the Ichthys LNG Project at Howard Springs on the outskirts of Darwin NT. This village is now known as Manigurr-ma Village. Land Surveys were successful in being awarded the survey work for the 18 month project. This work included setting out earthworks, drainage, in-situ and portable buildings, roads, paths, car parks, kerb and gutter and the services corridors.

2014

**RCE Rail, WA**  
**\$100,000,000**

**Client: Lend Lease**

Duplication of approximately 60km of Rio Tinto's existing Cape Lambert to Emu railway formation. Land Surveys provided up to 7 crews for the provision of infrastructure Surveying Services including: bulk earthworks setout for cut & fill; calculations & setout for construction of 2 bridges; drill & blast surveys & calculations; drafting of clearing permits and layout plans; conformance surveys and reporting; establishing control for machine guidance

2015

**WestConnex Stage 1b Early Works**  
**\$3,000,000,000**

**Client: Leighton / Samsung / John Holland JV**

Land Surveys have been providing survey for the Early Works and Design stages of the WestConnex project. The scope involves the following items;

- \* Creating a survey accurate Digital Cadastral Data Base over the entire project
- \* Undertaking a control network survey for use in tunnelling works
- \* Performing laser scanning operations along the corridor to assist with detailed design

A variety of methods and technologies were used to undertake the works. We used GNSS and Digital levelling.

2014

**Manus Island Processing Centre, PNG**  
**\$100,000,000**

**Client: Decmil Australia**

Surveying services for earthworks, underground services and building construction.

2014

**One on Aberdeen**  
**\$70,000,000**

**Client: Diploma Properties Pty Ltd**

One on Aberdeen is a thirteen storey building comprising of 161 one and two bedroom apartments, including a selection of split-level residences plus 550m<sup>2</sup> of ground floor commercial space. Land Surveys provided preliminary strata plan documentation and complete the as-built survey to facilitate registration of the strata plan and new certificate of title creation, successfully managing and co-ordinating the strata title measure to avoid any delays when applying for new titles.

**2014**

**Shell Prelude Supply Base, NT  
\$50,000,000**

**Client: Decmil Australia**

Decmil were awarded the contract to construct the on-shore supply base to cater for off-shore works on the Prelude LNG project. The supply base was built on approximately 5ha of land located in the East Arm Industrial area in Darwin. Land Surveys work included setting out earthworks, drainage, in-situ buildings, in-ground services, roads, car parks and kerb and gutter.

**2014**

**Umbilical Reel Dimensional Control, Laser Scanning and 3D Modelling  
\$100,000**

**Client: Subsea7**

Land Surveys was contracted by Subsea7 to provide dimensional control survey measurements and to develop a series of as-built 3D CAD models of a series of umbilical reels to assist in investigation of equipment design and interface issues. In order to achieve the project requirements it was proposed that the umbilical reels be dimensionally surveyed and laser scanned.

**2014**

**Wheatstone LNG Project  
\$60,000,000,000**

**Client: CB&I Constructors**

Structural, Mechanical, Piping for LNG OSBL onshore processing infrastructure.

**2014**

**Roy Hill Rail, WA  
\$600,000,000**

**Client: NRW**

Land Surveys was engaged by NRW to provide survey services for the Roy Hill Rail Project in the Pilbara region of Western Australia. The project consisted of the construction of approximately 330 kilometres of main line heavy haul rail formation for the main line between the Roy Hill Mine site and Port Hedland.

**2014**

**Transocean Legend Laser Scanning & 3D Modelling  
\$100,000**

**Client: AME Pty Ltd**

Land Surveys was contracted by AME Pty Ltd to develop a series of as-built 3D CAD models of the Transocean Legend to assist in equipment design and interface fabrication. In order to achieve the project requirements it was proposed that the Mobile Offshore Drilling Unit (MODU) be laser scanned and surveyed using a Faro Focus 3D laser scanner, whilst the MODU was in field on the Northwest Shelf Australia.

**2013**

**Broadmeadow Sustaining Operations, Moranbah QLD  
\$100,000,000**

**Client: Bechtel**

The Broadmeadow Sustaining Operations Project aimed to expand an existing underground mine using an existing open cut pit at the Broadmeadow mine to provide access for underground works where longwall mining will be used to access the coal seam. Land Surveys were the QA Surveyors for this project, providing 7 Surveyors and 2 Chainman.

**2013**

**Hopes Down 4**

**\$100,000,000**

**Client: Civmec**

Land Surveys were contracted to supply survey for the concrete civil works and SMP for this project. Scope of work included:

Calculations and set out for primary and secondary crushers dump slab, screening, classification, thickening, drive stations, 8km of conveyors and 4km of rail for stackers and re-claimers.

Mechanical survey support for the assembly and alignment of the above structures.

**2013**

**Western Turner Syncline Project**

**\$200,000,000**

**Client: NRW Pty Ltd**

Surveying services for earthworks and civil concrete for overload conveyor and processing plant

**2012**

**Moranbah Region Expansion, QLD**

**\$100,000,000**

**Client: BGC Contracting**

The Gs1b dam project had 3 main components, a 7.5 gegalitre dam measuring 800m by 600m, a 2.4km HV access road into Goonyella Mine and a 25km of pipeline to pump water from various other dams throughout the mine lease. Land Surveys involvement was a team of 5 surveyors using both GPS and 3D long range scanning for the construction and reporting of this project.

**2013**

**Karratha Leisure Centre, WA**

**\$60,000,000**

**Client: Pindan / Shire of Roebourne**

Land Surveys were the principal surveyor for Pindan during the construction of the underground pools ensuring the tight tolerances were met within the standards defined by FINA. The connecting holding and balance tanks for the aquatic precinct was paramount for the volume of water required to maintain pool levels. 300+ holding down bolts were placed during the construction of the buildings and structures of all various sizes- all requirement of the National Construction Code for Cyclone regions

**2012**

**Goonyella Riverside, GS1B Project**

**\$70,000,000**

**Client: BGC Contracting**

The Gs1b dam project had 3 main components, a 7.5 gegalitre dam measuring 800m by 600m, a 2.4km, HV access road into Goonyella Mine and a 25km pipeline to pump water from various other dams throughout the mine lease. Scope of work included:

Setout and documentation for clearing permits

Subgrade & Base-course setout for HV road

Setout of pipeline

Setout and As-con of services

Use of 3D Laser Scanner to conduct monthly volume surveys. Entire dam captured in a few hours

**2012**

**Pluto LNG Project**

**\$400,000,000**

**Client: Decmil Australia**

Surveying services for civil concrete and finishing works. Almost 2 years of work with up to 5 surveyors.

2012

**Warramboos Project**  
**\$50,000,000**

**Client: Downer EDI**

Structural works for a three span steel beam bridge (57 meters) and a precast tunnel (48 meters). Scope of work included bulk earthworks for the construction of 3.4km Haul Road, 5.8km of general vehicle access roads, 2km of realigned Northwest Coastal highway and all associated drainage works from Rio Tinto's Warramboos Mine expansion zone to their existing Mine. Established primary survey control, secondary control and carried out all associated structural and earthworks surveys.

1997

**Mt Magnet**  
**\$100,000**

**Client: Watpac**

Land Surveys have been contracted by Watpac to provide a regular aerial survey solution for their Galaxy Operations at Hill 50 in Mt Magnet. Key deliverables are: \* Digital Elevation Model (DEM) with sample spacing of 50mm \* Georeferenced image of the entire site with a ground sample distance of 50mm

1997

**Boddington, Tanami, Woodcutters**  
**\$100,000**

**Client: Newmont**

Mine Survey and Aerial Mapping Services

1997

**MRWA Contract Survey & Mapping Panel**  
**\$2,000,000**

**Client: Main Roads Western Australia**

Engineering Survey, Aerial Mapping and Laser Scanning Services

**Land Surveys**

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