

# **Capability Statement Underground Service Locating**

# March 2020

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# **Table of Contents**

Introduction to LandPartners Pty. Ltd	. 1
Underground Service Locating (USL)	. 1
Our Scope of Works	. 2
Project Experience:	. 2
Examples of Recent Projects	. 3
APA - Western Outer Ring Main (W.O.R.M.) Gas Pipeline	3
Castaways Beach Sewer Pumping Station, Qld – Cardno (Qld) Australia	4
Lennox Head State School, NSW – 4C Optimised Solutions	5
Walloon Trunk Watermain and Trunk Sewer Main – Calibre Consulting	6
Ipswich City Mall - 4C Optimised Solutions	7
Panel Memberships and Consulting:	. 8
Queensland:	8
National	8
Quality Assurance Certification	. 8
Contact Details	8

#### INTRODUCTION TO LANDPARTNERS PTY. LTD.

LandPartners Pty. Ltd. are a Surveying, Town Planning and Underground Service Locating consultancy providing a broad range of land and environment related expertise and advice to our clients.

Our head office is in Brisbane, with major offices in Springfield (QLD) and Rydalmere, Sydney.

The company has its origins dating back to 1962 and has grown to become one of Australia's most successful Surveying, Planning and Underground Service Location firms.

Additional information regarding LandPartners' full scope of Surveying, GIS and Planning, Mapping and Underground Locating Services may be accessed on our website <a href="https://www.LandPartners.com.au">www.LandPartners.com.au</a>

This Capability Statement focuses on our Underground Service Location services. We also showcase recent projects on our "LandPartners" YouTube channel

# UNDERGROUND SERVICE LOCATING (USL)

LandPartners Pty Ltd are a Certified Locating Organisation (CLO) with DBYD/Telstra Certified Locators on staff.

We understand Locating, Identifying, Surveying and accurate 3D Modelling of Underground Assets is a key component of a Risk Mitigation strategy to minimise Latent Conditions Risk.

Our DBYD Certified Locators are State Registered Surveyors (NSW and QLD) and have Gas Testing and Confined Space Entry and Rescue certifications. We also have significant 3D modelling expertise.

This means the combination of services we can bring to USL are quite unique.

We combine;

- The latest Electro-Magnetic Locating (EML) and Ground Penetrating Radar (GPR)
  Locating Technologies.
- 3D Scanning Surveying, Total Station and GPS Technologies.
- Safe Confined Space Entry and Gas Testing.
- Project Management and Coordination of Vacuum Excavation and Traffic Control.
- BIM Quality modelling of underground assets to AS5488 Classification.

We deliver the safest, accurate and best possible quality No-Dig Location, Surveying and Mapping of Underground Services.

#### **OUR SCOPE OF WORKS**

The Scope of our Underground Service Locating capability includes:

#### **Investigations & Preliminary Design**

Desktop Compilation of AS5488 Quality level D DBYD models for Investigation,
 Preliminary Design and Strategic Planning.

#### Detailed Design Constraints, Latent Conditions Risk Mitigation

- Full 3D Services Surveys of Located Assets with Attributed Data.
- Safe, remote 3D Laser scanning of Confined Spaces
- 3D data modelling in Civ3D, 12D, Revit for Engineering Detailed Design / BIM.
- Coordination of Vacuum Excavation and AS5488 Quality level A Surveys for Physical Verification of Underground Assets.

#### Clearance Surveys

- Full Clearance Locating.
- Mark-Out and Survey prior to Excavation and Construction.

#### PROJECT EXPERIENCE:

Our most recent Project Experience includes:

- Establishing Site Conditions for infill Brownfield Projects.
- Constraint Mapping for longline Infrastructure (Underground Pipeline Design).
- Easement Calculations over unmapped, undocumented historical services.
- Collation of undocumented Assets, confirmation of documented Assets.
- 3D Modelling for Facility Management (BIM).
- Pre-Tender Latent Condition Risk Mitigation and Variation Management.
- 3D Mapping and Revit modelling of above ground and sub-surface Services, Structures and Natural Features.
- Confined Space Entry for Scanning and Surveying of major sub-surface structures and spaces.
- Constraints Mapping for Property Development, Land Titling for Sub-Surface utilities.
- Utilities / PUP GIS, Mapping and Spatial Information.
- Project Management for Vacuum Excavation and Traffic Control.

#### **EXAMPLES OF RECENT PROJECTS**

# APA - Western Outer Ring Main (W.O.R.M.) Gas Pipeline

LandPartners was contracted to provide a Contour and Detail Survey, Underground Service Locating and a Services Survey for APA's proposed 51km WORM Gas Pipeline project in outer Melbourne, Victoria.

Our contract was to establish a survey control network, boundary re-establishment and Creation of Easement Plans, Contour and Detail Surveys, terrestrial 3D Laser Scanning surveys within road and rail corridors, Potholing of any Crossing Services to the proposed alignment and Pipeline Route set-out.





#### LandPartners Scope of Works included:

- Locating and Services Surveys along the entire route and generating a 3D file to AS5488 Quality A, B and C classifications.
- Project Management for;
  - Subcontracting Local Vacuum Excavation services to expose Quality C assets and improve results to AS5488 Quality A Classifications.
  - o Consultation with individual Asset Owners to confirm Duty of Care requirements.
  - Procuring VicTrack permits to Locate and Survey inside rail corridors (the rail corridor is used by multiple operators such as ARTC, V/Line and Metro, who all required notification).
  - Coordinating VicRoads Memorandum of Authorisation (MOA) and Local Council
    Permits to work within Major road corridors.
- Detailed Reporting of Locating and Potholing results.

Contract Value to date: \$771k

## Castaways Beach Sewer Pumping Station, Qld – Cardno (Qld) Australia

LandPartners provided Confined Space Entry, 3D Laser Scanning, EML and GPR Underground Services Locating and 3D modelling to provide an As Built 3D model of a Sewer Pump Station at Castaways Beach, Sunshine Coast Qld.

The facility needs upgrading however the original Design plans did not agree with the Constructed facility. Cardno contracted LandPartners to survey and measure the internal structure and underground piping to establish an accurate 3D model for Detailed Design.

The full video of the Confined Space preparations, measurements and final 3D model can be viewed on LandPartners' YouTube channel

#### Scope of Works included:

- Confined Space Entry with 3D Laser Scanner.
- EML and GPR Surveys of surrounding area to map Sewer Pipework and ancillary cabling to the Pump Station.
- 3D modelling and Delivery of Revit model.
- 360 Degree photos and footage to assist with Dilapidation assessment.

#### Contract Value \$25k





# Lennox Head State School, NSW – 4C Optimised Solutions

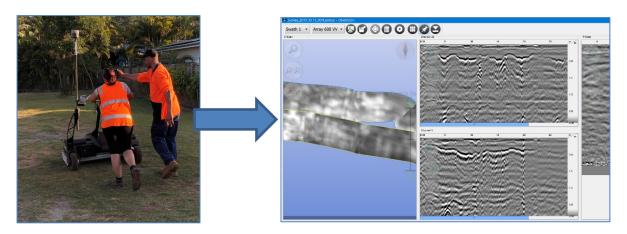
LandPartners were contracted to provide a survey and 3D model of sub-surface and surface site conditions for Lennox Head State School.

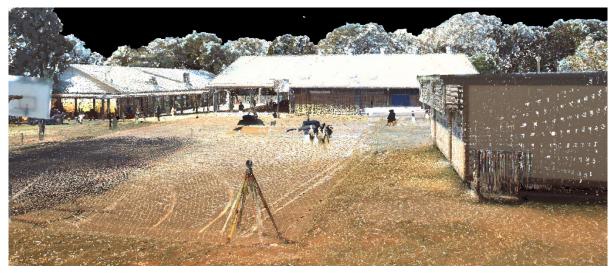
The site contained old and buried abandoned undocumented services (Power, Irrigation, Sewer, Fibre Optic), existing live services, sub-surface Cultural Heritage artefact sites and buildings designated for Demolition.

LandPartners provided full 3D Service Locating, 3D laser scanning and Survey and modelling of Underground Services and existing buildings at Lennox Head State School to allow:

- Planning and safe execution of Building Demolition.
- Recognition and preservation of areas containing Cultural Heritage Artifacts.
- Architectural Detailed Design of new structures and connection to existing services.

#### Contract Value \$32k





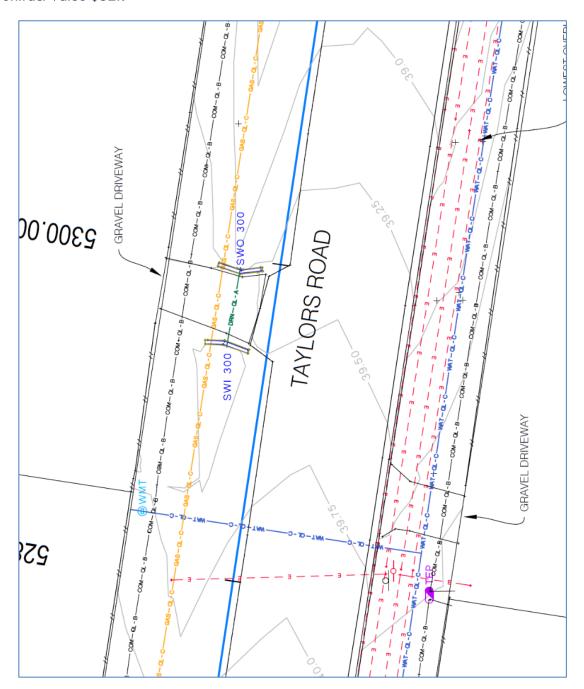
# Walloon Trunk Watermain and Trunk Sewer Main – Calibre Consulting

LandPartners were appointed by Calibre Consulting (Qld) Pty Ltd Engineers to provide Project Control, Contour and Details Surveys and Overhead and Underground Services Location to enable Detailed Design for approximately 5km of Trunk Watermain and 5km of Sewer Rising Main at Walloon.

#### Scope of Works included:

- Surveying and Locating Underground Services.
- Sub-contracting Vacuum Excavation services to expose and confirm services, and Traffic Control.
- Preparing 3D CAD model plus PDF plots and a Report for design.

#### Contract Value \$52k



# Ipswich City Mall - 4C Optimised Solutions

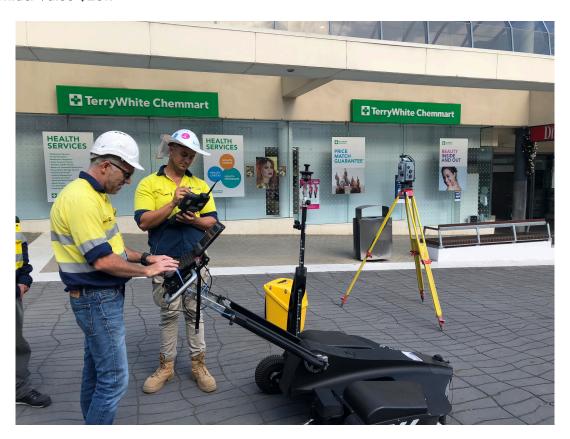
LandPartners provided 3D Mapping of Documented and Undocumented Historical sub-surface Services using EML, Terrestrial Survey and a High Definition IDS Stream C GPR unit for Ipswich City Council's redevelopment of the Ipswich City Mall.

The project was in Demolition phase and the Contractor (JMac) requested urgent clearance for excavation.

#### Scope of Works included:

- Collating Historical datasets to provide initial overall model.
- Complete Survey and 3D Mapping of Known and Discovered Services and Features for Safe Excavation.
- Uploads and Control for Future Surveys of Located Services.
- A3 Plots for Site Superintendent to plan Pothole Strategy
- Report highlighting High Risk areas and recommending areas for Potholing to Physically confirm utilities.

#### Contact Value \$25k



#### PANEL MEMBERSHIPS AND CONSULTING:

#### Queensland:

• Brisbane City Council Panel for Underground Service Locating and Surveying.

#### National

- Member of National Utility Locating Contractors Association (NULCA)
- Member of Dial Before You Dig (DBYD)
- Accredited DBYD Certified Locating Organisation (CLO).

#### QUALITY ASSURANCE CERTIFICATION

LandPartners have a Third Party certified Quality Management System complying with the requirements of ISO 9001:2015. Certificate number FS535063, issued by BSI Benchmark Certification.

LandPartners have an OHS&R Management System as part of their overall management plan. As part of this system, our Site Safety Management Plans (SSMP) and Safe Work Method Statements (SWMS) form an integral part.

LandPartners are Third Party certified for AS/NZS 4801 Occupational Health and Safety Management Systems, and OHSAS 18001 Occupational Health and Safety Management Systems

#### CONTACT DETAILS

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