

ANDREW CROPLEY

Project & Senior Surveyor

EXECUTIVE PROFILE

Accomplished **Project & Senior Surveyor** with over 8 years of specialized experience delivering Tier 1 infrastructure, rail corridor developments, complex urban tunneling, high-precision structural monitoring, and major commercial construction. Proven track record leading survey operations on high-profile infrastructure packages, including the **Level Crossing Removal Project (LXRP)** and the **Melbourne Metro Tunnel**. Recognized for expertise in primary survey control networks, 3D laser scanning & point cloud integration, automated deformation monitoring, and **AI-driven spatial automation & LLM workflows**. Strong leader skilled in stakeholder engagement, subcontractor oversight, and driving zero-rework QA compliance.

CORE COMPETENCIES & TECHNICAL EXPERTISE

ENGINEERING & INFRASTRUCTURE SURVEYING

Level Crossing Removals (LXRP) Rail Corridors & Trackwork
Tunneling & Subterranean Structural Setout
Primary Control Networks Utility Relocation

SPATIAL DATA & AUTOMATION SYSTEMS

AI-Assisted Spatial Scripting & LLM Workflows
Automated Deformation Monitoring 3D Laser Scanning
Point Cloud Integration 12d Spatial Automation
High-Accuracy As-Built

SOFTWARE & SURVEY TECHNOLOGY

12d Model 12d Synergy Leica GEOMOS
Leica Captivate & Infinity AutoCAD
Robotic Total Station & GPS/GNSS

LEADERSHIP & QUALITY ASSURANCE

Subcontractor Management Graduate Mentoring
Resource Scheduling Alliance Stakeholder Liaison
Zero-Rework QA Sign-off

PROFESSIONAL EXPERIENCE

ACCIONA AU & NZ — Project Surveyor

May 2024 – Present

Tier 1 Infrastructure — Level Crossing Removal Project (LXRP) | Parkdale LXRP & Mordialloc LXRP

- Lead survey operations across major rail, civil, and structural packages for the Parkdale and Mordialloc Level Crossing Removal Projects.
- Establish, maintain, and expand high-precision primary survey control networks across active rail corridors and structural work zones.
- Implement automated monitoring systems and 3D point cloud / laser scanning integration for complex rail corridor handovers and structural inspections.
- Leverage AI-assisted Python scripting and LLM workflows to automate 12d Model data transformations, feature extraction, and rapid QA compliance reporting, significantly reducing processing turnarounds.
- Drive spatial data integration and automated workflows in 12d Model & 12d Synergy, streamlining digital data transfers between field surveyors and alliance engineers.
- Manage precision setout, bulk earthworks, utility relocations, and final as-built verification to satisfy VicTrack, MTM, and LXRP alliance specifications.
- Supervise and mentor site surveyors, schedule survey resources, and serve as a survey liaison for site engineers, project managers, and key alliance stakeholders.

Veris Australia — Senior Surveyor

May 2023 – May 2024

Tier 1 Infrastructure — Melbourne Metro Tunnel Project | Town Hall Station (CYP)

- Served as lead surveyor at Town Hall Station, maintaining end-to-end accountability for Veris' on-site survey delivery in a high-density urban subterranean project.
- Acted as the primary point of contact for alliance stakeholders, site engineers, superintendents, and external partners.
- Managed site QA reporting, resource scheduling, survey control integrity, and precision equipment calibration.
- Facilitated staff performance reviews, mentored junior team members, and optimized operational workflows on site.

Veris Australia — Engineering Surveyor

Sep 2021 – May 2023

Tier 1 Infrastructure — Melbourne Metro Tunnel Project | Town Hall Station OSD (CYP, Delta)

- Managed survey operations across three major sub-sites: Federation Square, Flinders Over-Site Development (OSD), and City Square.
- Led on-site survey execution for Flinders OSD and City Square within a 6-person survey team; mentored graduate rotation assistants.
- Conducted setout, as-built surveying, and QA reporting for deep excavations, structural concrete, and heritage elements.
- Delivered civil reinstatement and streetscape refurbishment works for Flinders Street, Flinders Lane, Cocker Alley, Scott Alley, and Campbell Arcade.
- Utilized 12d Synergy, 12d Model, and 12d Survey for high-accuracy spatial modeling and control network expansion.

Absolute Surveying — Project Surveyor

May 2017 – Sep 2021

Land & Engineering Surveying for Major Commercial & Infrastructure Construction

- **Melbourne Quarter Tower** (*Lendlease, Delta, I&D*): Installed and managed Leica GEOMOS continuous automated monitoring equipment/software; laser scanned adjacent structures for future unification works.
- **Airtrunk Hyperscale Datacentre** (*Built, Delta, Westkon*): Delivered high-accuracy surveying for precast concrete structures, access roads, and civil infrastructure.
- **HMAS Cerberus Redevelopment** (*Lendlease, Ventia*): Maintained suburb-sized survey control networks using GPS and total stations for deep sewers, pumping stations, and building footprints.
- **Sugar Store 9** (*Sugar Australia*): Conducted safety-critical monitoring of timber beam jacking in a heritage warehouse, developing real-time precision survey workflows.

Jocken Builders — Builder's Labourer

Oct 2014 – Nov 2016

Commercial & residential construction logistics, trade coordination, and site support.

EDUCATION & PROFESSIONAL CREDENTIALS

Advanced Diploma of Surveying

RMIT University (2018 – 2019)

Diploma of Surveying

RMIT University (2017 – 2018)

Rail Industry Worker (RIW) Card

Construction Induction Card (White Card)