

Thursday 24 August 2023 at 5:00pm

Register to attend in person at the Sydney Masonic Centre via the PWI website (pwinsw.org.au) or virtually via Microsoft Teams.



Aurecon is a design, engineering and advisory company. Aurecon has been a leader in the delivery of geospatial intelligence for more than 20 years.

Our global team draws upon a combination of industry experience, business insight and technical knowledge to deliver innovative digital solutions across a wide variety of disciplines and industries.

August PWI Technical Meeting and AGM is proudly sponsored by Aurecon.

Martin Nowak, Aurecon's Geospatial Practice Leader for NSW and the ACT, and team, will present on the latest advances in digital capture of tunnel profiles and modelling train outlines for more efficient design, verification and planning.

Advances in the digital capture of tunnels and train outlines

Recent digital advancements have transformed our understanding of trackside infrastructure clearance.

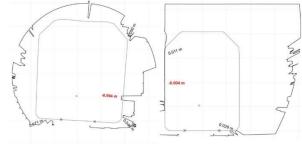
With technologies like LiDAR scanning, high-resolution cameras, and advanced software, we can now capture precise representations of tunnels and train outlines.

This technology employs data processing, machine learning, and computer vision for accurate calculations and 3D modelling of rollingstock outlines.

Extracting key features and generating digital models aids engineering design, verification, and future planning.

In this presentation, Martin and team will showcase successful deployments, emphasising compliance with standards and the potential to enhance safety, efficiency, and sustainability in the rail network.







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The PWI NSW is the institution for rail infrastructure engineering. Our purpose is to share knowledge, build community and to support industry capability development for people working in rail infrastructure systems.

The PWI NSW was formed in 1974 and is one of the largest and most active sections of the Permanent Way Institution worldwide.

Our August PWI Member Technical Talk is provided by:

Sydney Trains Engineering & Maintenance - Major Works

Projects and capabilities of Sydney Trains Engineering & Maintenance - Major Works

Major Works is Sydney Trains' primary project delivery arm, with internal capability to plan, manage and deliver infrastructure upgrades and maintenance activities across a multitude of disciplines.

Each year its 1000+ person team undertakes \$600M of major maintenance projects within they Sydney Trains and NSW Trains Network.

Projects are diverse in nature and can range from Turnout Renewals, Area Remodelling, Overhead Wiring Modernisation and Operational Technology.

In addition to planned maintenance projects Major Works teams also respond to significant network incidents which include Mount Victoria landslip and Linden derailment.



