

Edward (Ted) J Nye

	Nationality	Australian
	Year of Birth	1952
	Profession	Chartered Engineer
	Specialisation	Underground Engineering – Transport
	Position	Director, E J Nye & Associates Pty Ltd

KEY QUALIFICATIONS

Over 35 years design and construction experience on a wide range of major underground and related transport projects. Delivery manager, design management, design team leader, tunnel design engineer and associated construction methodologies. Project concept development for major projects, both road and rail. Specialist experience in assessing the interaction between underground and surface structures. Multi-disciplinary experience, lead teams including structural, geotechnical and E & M including tunnel ventilation and fire safety. Provide leadership and innovative design and construction solutions. Extensive client side, D & C and Alliance contract experience. Recent (2015) overseas visits to TBM factories, Herrenknecht, Germany and CREG, Zhengzhou, China. Numerous overseas presentations.

EDUCATION AND PROFESSIONAL STATUS

Bachelor of Engineering (Civil), Swinburne College of Technology, 1977
 Diploma of Engineering (Civil), Caulfield Institute of Technology, 1974
 Member of the Australian Geomechanics Society (AGS)
 Member of the Australasian Tunnelling Society(ATS)
 Fellow of the Institution of Engineers, Australia
 ATS Representative AUSTRROADS Tunnelling Committee (2010 – 2015)
 Chairman of the 15th Australasian Tunnelling Conference, September 2014.
 During 2015 was a presenter at four overseas conferences (Singapore, Shanghai, New Orleans, Switzerland, three by invitation), Shanghai, 2016(invited speaker) and Wuhan, Nov. 2017.

EXPERIENCE RECORD

Dec 2016 – present E J Nye & Associates Pty Ltd, Transport Tunnel Specialist

Developing a large rail infrastructure project, presentations currently to council staff along the route and both state and federal politicians (Value > \$10billion). Initially aiming to get the project into the TfNSW future transport plan. Advisor and reviewer of a number of submissions to Sydney Trains and ASA on behalf of numerous clients. Recent completion in an expert engineer role to help resolve a dispute between two Tier 1 Contractors and a major transport asset owner, Melbourne. Advisor to Sydney Airport, for continuing infrastructure development at the airport. Continuing involvement on the Norwest Rail Link Project, Airport Line, Project 2C at Sydney Airport and the Sydney Harbour Bridge Toll Plaza removal project. Review of Assets Standards Authority - NSW new standard on tunnel protection.

2011 – 2016 Mott MacDonald Australia Pty Ltd, Tunnel Practice Leader

Led a group of geotechnical, tunnel, ventilation and as required structural engineers.

St James Station - inspection and assessment of disused platforms and tunnels. Client: confidential

Barangaroo Central - advising developers bid team on the interface issues between the development and the proposed Barangaroo Station in Hickson Road. Client: Lend Lease.

Barangaroo South - developed the criteria to design the building foundations to preserve the Sydney Metro rail corridor down to Darling Harbour. Risk assessment for tunnelling. Client: Lend Lease.

North West Rail Link (OTS contract)- team lead, shafts (provided fully tanked solution with tension piles), shallow cover pedestrian tunnels connecting to stations, y-junction interface connection with the ECRL. Inspections of ERCL tunnels associated with upgrades for the driverless trains.

Airport Rail Link – assessment of in-situ concrete lining including testing and strain gauge monitoring. Engaged materials and survey monitoring specialist. Hard rock section. Client: Broadspectrum

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Project 2C - Sydney Airport – approvals from Sydney Trains for deep piling, design reviews.

WestConnex – Advisory – technical for tunnels

North Strathfield Rail Underpass – Shaved three years off construction program with driven tunnel solution. Construction supervision through the site PTT process. Client SKM/PB JV.

Melbourne Metro – client side - verification tunnels and review of station cavern reference designs. Review of alignments, inspection of SI core, review of standard to be used.

2002 – 2010 Sinclair Knight Merz, Tunnel Engineering Manager

Northern Link, Brisbane – Technical assessment of the EOI for this 4km long road tunnel.

Boggo Road Busway Tunnel, Brisbane – Led the driven tunnel design team. Detailed design of a 15m wide by 430m long busway tunnel with very shallow ground cover. Construction supervision. Alliance contract.

Epping Chatswood Rail Link – Project Manager for Railcorp asset assessment report prior to their acceptance of the asset transfer from and delivered by another government department.

Eastlink Freeway Project, Melbourne – Design and site visit construction reviews of the 1.5km long twin three lane road tunnel. Client: South East Integrated Transport Authority.

North South Bypass and TransApex Road Tunnels, Brisbane – Review of construction methods and design, co-ordination and review of tunnel. Client: Brisbane City Council and State Government.

M2 – F3 Connection (now Northconnex). Design planning, supervision of tunnel ventilation, geotechnical engineering, cost estimator for up to 10km of tunnel. Client: Federal Dep. Transport

Lane Cove Road Tunnel – High level advice to the Lane Cove Tunnel Company throughout project.

Expert Witness - 1 - Claim processed through arbitration following a fatal rock roof fall on the Cross City Tunnel. Specialist advice given on the construction methodology adopted by the contractor.

Expert Witness – 2 – Supreme Court of NSW. Assessed the potential impact of new building development on an existing 1970s cut and cover twin track rail tunnel.

Overseas Assignments. Led team of specialist, geotechnical, cost estimator, construction and TBM. Feasibility of twin 10m diameter tunnels for mine access in Andes Mountains, Chile.

1989 – 2001 E J Nye and Associates Pty Ltd, Director (Self Employed)

M5 Motorway Road Tunnel – Consultant at tender, design and construction phases. Client: RTA.

Airport Rail Link (Sydney) – EIS construction methodology, interfacing with the FAC, project management, technical reviews, site inspections including deep diaphragm walls. Soft ground tunnel by 11m diameter slurry TBM (6km in length) and the Cooks River Crossing (using circular coffer dams). Client: Rail Access Corporation/Kinhill.

Tunnel Protection. Developed guidelines then reviewed numerous developments along the 11km length of the Airport Rail Link, either for developers, Railcorp or Sydney Airport.

Epping Chatswood/Parramatta Rail Link – EIS construction methodology, client for tender issued design of the station caverns. Tunnelling methods leading into Parramatta. Client: DoT and PRL.

North West Rail Link. Initial planning for the alignment and station locations. Client: Arups

Overseas Assignments: Hong Kong, verification, Tai Lam Road Tunnel. For ADB, feasibility, 150km freeway, China (with 54 tunnels and 120 bridges), sponsored study tour of Europe for the ARL project.

1974 – 1989 John Connell, Mott, Hay and Anderson - Senior Tunnel Engineer

Shangri la Hotel, Sydney. Design team leader all site civil works including over the railway tunnel.

Sydney Harbour Tunnel. Design team leader for the land tunnels. Project design engineer for the feasibility study including the immersed tube connection at the SOH Forecourt. Client: Transfield/Kumagai.

Melbourne Underground Rail Loop (MURL). Geotechnical monitoring tunnels and all stations then structural design of station booking halls and pedestrian tunnels. Viaduct repairs, bonding various materials, specifications, and testing. Client: MURLA

Overseas Assignments. Hong Kong (12 months) slope, retaining wall and tunnel stability. London, major bridge and building foundations, study for immersed tube crossing of the English Channel. Large hydro tunnels in Malaysia, contractors claim, rock bursts.

Publications - over 35 published papers and articles