

# Webinar

## Talk on Trackwork Design on a Mass Rapid Transit Project

6 JULY 2021 | 5 PM TO 7 PM



**Ir. Reuben Lamack**

BEM Approved CDP: 2 Hours  
Ref. No.: IEM21/HQ/220/T(w)

Registration fee

Student Member: Free

IEM Member: RM15.00

Non-Member: RM70.00

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## Synopsis

Trackwork design on a Mass Rapid Transit (MRT) system is complex with respect to coordination requirements and minimal availability to mitigate construction deviations. The fundamentals of the track geometry and system parameters provide the operational requirements of the MRT system. Safety and risk assessments will define the facilities to ensure safety requirements are adhered to.

Detailing the trackwork with its associated infrastructure (power rail, point motors, crossovers, primary and secondary systems troughs, trackforms, fastenings, walkways) and rail ancillaries requires detailed consideration of geometric constraints, speed profile, clearance requirements, system interfaces, constructability and maintainability. BIM modelling has proven to be an invaluable tool for identification of clashes, missing detailing and constructability issues leading to accurate design of the works.

Mr. Reuben Lamack Technical Director from Jacobs will provide technical insights on the key elements of trackwork design on a Mass Rapid Transit system. He leads the trackwork design team on the KVMRT 2 project and will outline design fundamentals and lessons learned on trackwork projects, provide insights of the delivery of the design with BIM, highlight key design coordination requirements with systems, walkway, elevated and tunnel structures and share some constructability issues, challenges and solutions.

## Speaker's Biodata

Mr. Reuben is a Chartered Engineer with over 30 years' experience in rail and underground work. He has extensive Australian and International experience, and specializes in the management, design and construction of Mass Rapid Transit, Light Rail Transit, High Speed Rail, Heavy Rail and Transportation Tunnel projects from concept to close out. He leads international design teams in the delivery of rail and tunnel projects and is a Technical Director with Jacobs Engineering. His recent and current roles include the following:

- Klang Valley MRT2 - Design Project Manager Trackworks
- Klang Valley Double Tracking -Design Project Manager Rail
- Klang Valley LRT3 - Design Project Manager Trackworks

Mr. Reuben leads rail teams on various contract configurations from Alliances, Design & Construct to Traditional Design & Supervision. Previous relevant roles are Design Manager for the rail design team on the UHVA Alliance (ARTC, Leighton, Parsons Brinckerhoff and Coffey) delivering rail upgrades in the Upper Hunter Valley, Design Delivery Manager for Sydney Metro Feasibility Study, Technical Advisor on HSR projects in Thailand & Indonesia.