



cembra

engineering consultancy

COMPANY PRESENTATION

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SUMMARY

- **Cembra Engineering Consultancy Overview**
- **CV of Michael Schmaus, P.Eng.**
- **Project Experience**
- **References**
 - **Tunnel Engineering**
 - **Geotechnical Works**
 - **Structures and Bridges**
 - **Shop Drawing Production, Detailing and BIM**

CEMBRA ENGINEERING CONSULTANCY



Start-up:	January 2025
Legal form:	Sole Proprietorship, UEN 53476816D
Partnership:	LLP in progress
Practice in:	Singapore Germany Canada Thailand
Services:	Geotechnics and Structures Analysis and Design Building Information Modelling and Drafting

Michael Schmaus, P.Eng.

Nationalities: German and Canadian Citizen
Singapore PR

Experience: 19 years

Qualifications: Professional Engineer Singapore (5530)
Professional Engineer Canada, BC (36211)
Professional Engineer Germany, BY (113462)

Universities: National University of Singapore, PhD (part-time ongoing since 2023)
École Nationale des Ponts et Chaussées, Paris, M.Sc. (2007)
Technical University of Munich, M.Sc. (2004)



EXPERIENCE IN TUNNELS AND GEOTECHNICAL ENGINEERING

01/2024-10/2024	Part-time design manager at Ed. Zublin AG, Contract DTSS2 T-07 PUB DTSS2 Project, Singapore
09/2017-12/2023	Technical office manager for Ed. Zublin AG, Contract DTSS2 T-07 PUB DTSS2 Project, Singapore
05/2017-10/2017	Design Manager for Ed. Zublin AG, Contract DTSS2 T-07 JTC Project for Service Tunnels in Jurong Island, Singapore
03/2015-05/2017	Design manager for Ed. Zublin AG, Contract T3003 LTA Project for Advance Sewer Diversions, Singapore
06/2013-03/2015	Project Engineer for Ed. Zublin AG, Tunnel Rastatt and Alabastieg German Railway Project, High-speed Railway Tunnels in Germany

EXPERIENCE IN BRIDGES AND STRUCTURES

06/2012-03/2013	Project Manager for Oculus Entrance Hall to PATH Train Station Port Authority of NY & NJ, Oculus MRT Project in New York City
06/2010-06/2012	Project Manager for BC Place Stadium Roof Replacement CANAM Steel Erection Company, Vancouver, Canada
02/2010-06/2010	Project Engineer on the Qatar Bahrain Causeway Bridge Project Vinci and Hochtief JV, Doha Qatar
04/2007-02/2010	Bridge Engineer for COWI NA in Vancouver, Canada City of Vancouver, Vancouver, Canada
09/2005-09/2006	Bridge Engineer for Freyssinet International & Cie. Paris, Seoul and Bangkok

EXPERIENCE IN BRIDGES AND STRUCTURES

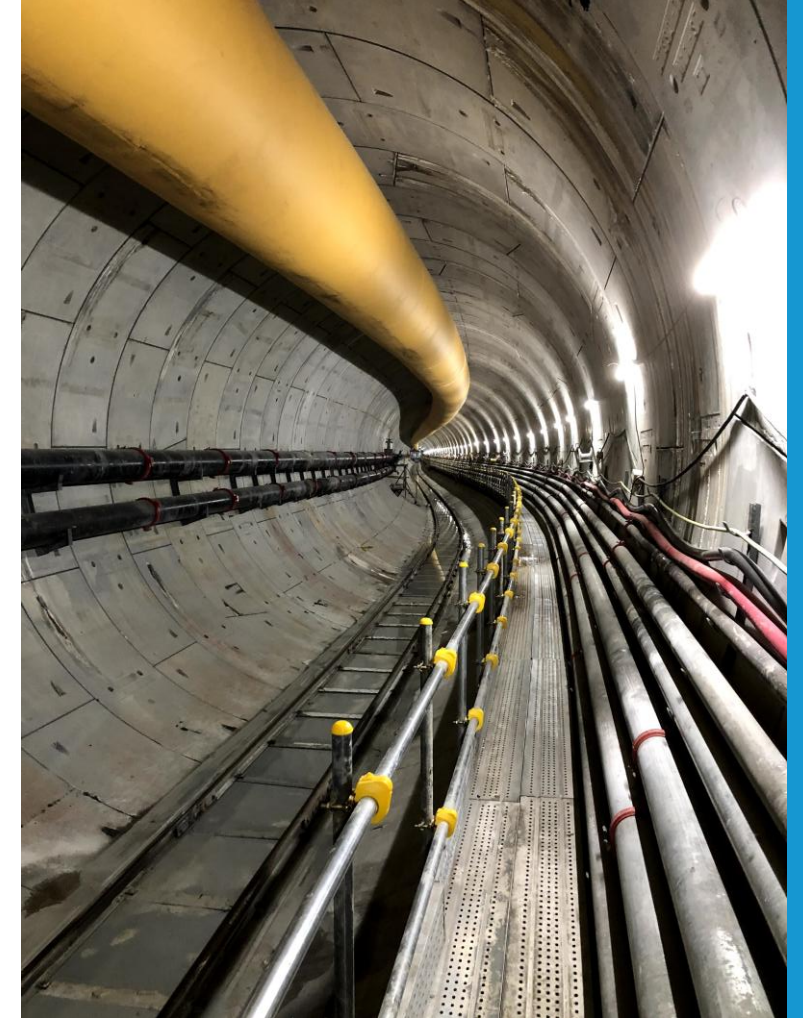
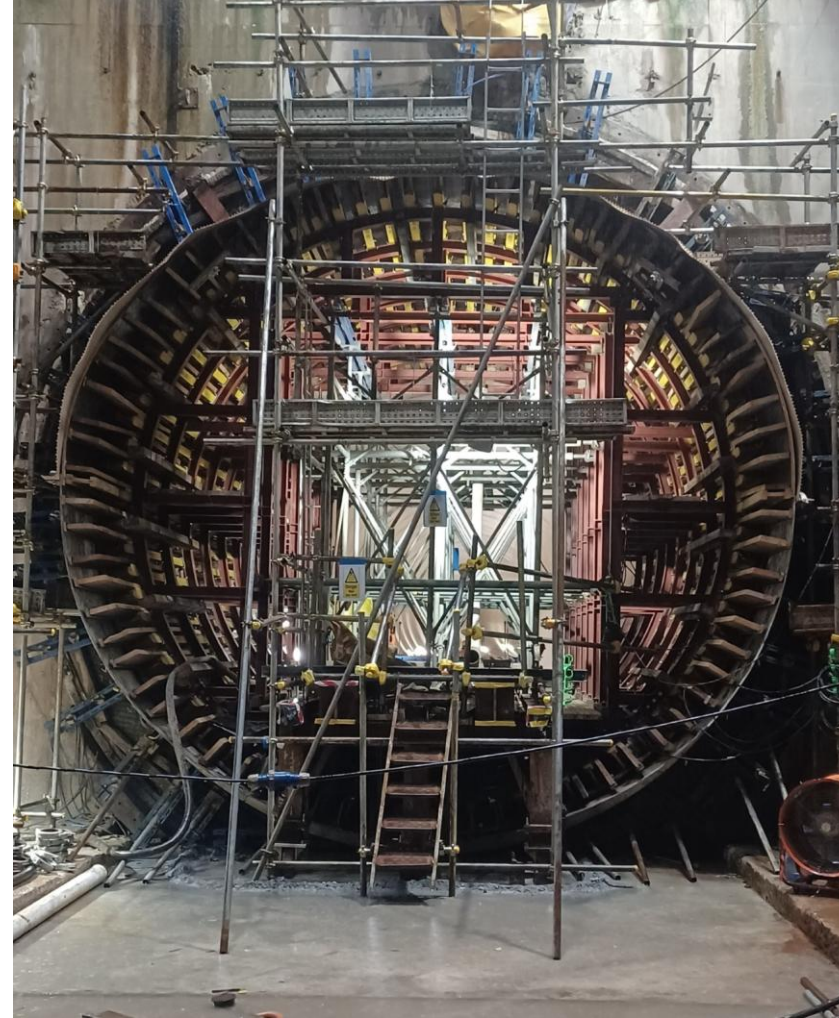
06/2012-03/2013	Project Manager for Oculus Entrance Hall to PATH Train Station Port Authority of NY & NJ, Oculus MRT Project in New York City
06/2010-06/2012	Project Manager for BC Place Stadium Roof Replacement CANAM Steel Erection Company, Vancouver, Canada
02/2010-06/2010	Project Engineer on the Qatar Bahrain Causeway Bridge Project Vinci and Hochtief JV, Doha Qatar
04/2007-02/2010	Bridge Engineer for COWI NA in Vancouver, Canada City of Vancouver, Vancouver, Canada
09/2005-09/2006	Bridge Engineer for Freyssinet International & Cie. Paris, Seoul and Bangkok

SERVICES OFFERED

- **Temporary works design and endorsement**
- **Geotechnical analysis and design of all geotechnical works**
- **Structural analysis and design of bridges and cable-supported structures**
- **Specialist design for pipe jacking and jacking pipes**
- **Specialist design for Steel-fibre Reinforced Concrete (SFRC)**
- **Specialist design for Glass-fibre Reinforced Polymer (GFRP) concrete structures**
- **Formwork and falsework design and endorsement**
- **Design for Safety Professional (DfSP)**
- **Earth Control Measures (ECM) design and Qualified Erosion Control Professional (QECP)**

REFERENCES





TUNNEL ENGINEERING

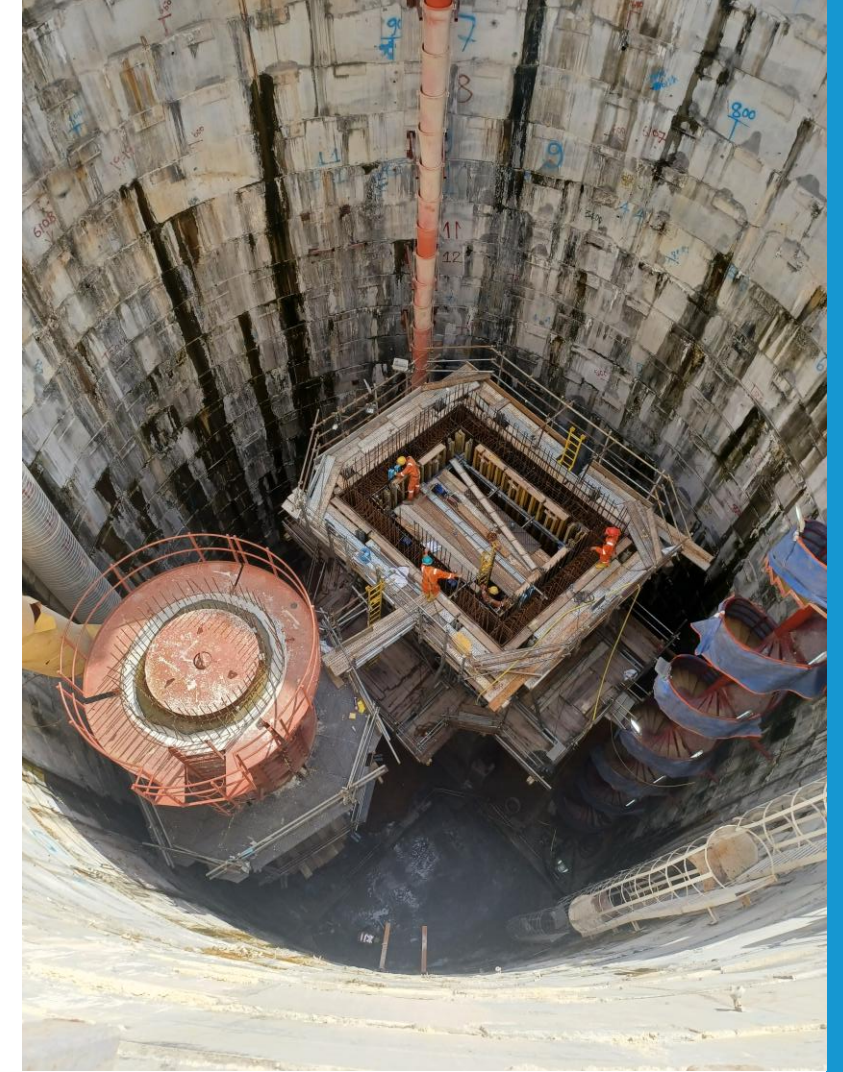
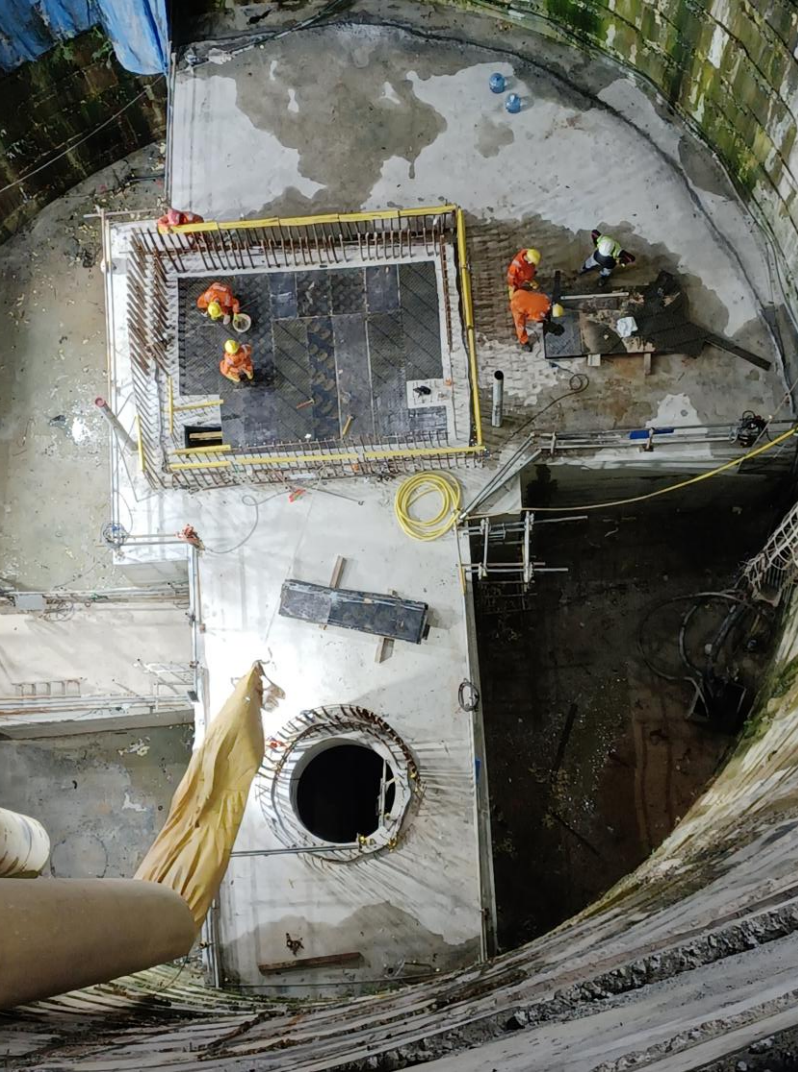
Design of tunnel-related temporary works, geology review, and DSC claim support



Retaining wall design for Konrad Schmaus GmbH

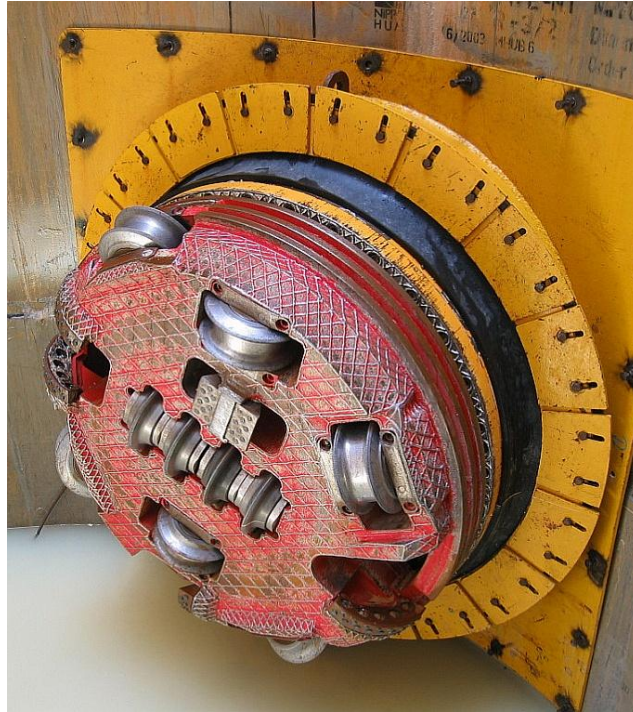
GEOTECHNICAL WORKS

Geotechnical Analysis and design of all geotechnical works, ERSS, slopes, shafts, etc.



FORMWORK DESIGN

Detailed design and endorsement for system and custom formwork including slip forming



PIPE JACKING DESIGN

Detailed design of pipe jacking face pressure, plant set-up and jacking pipes



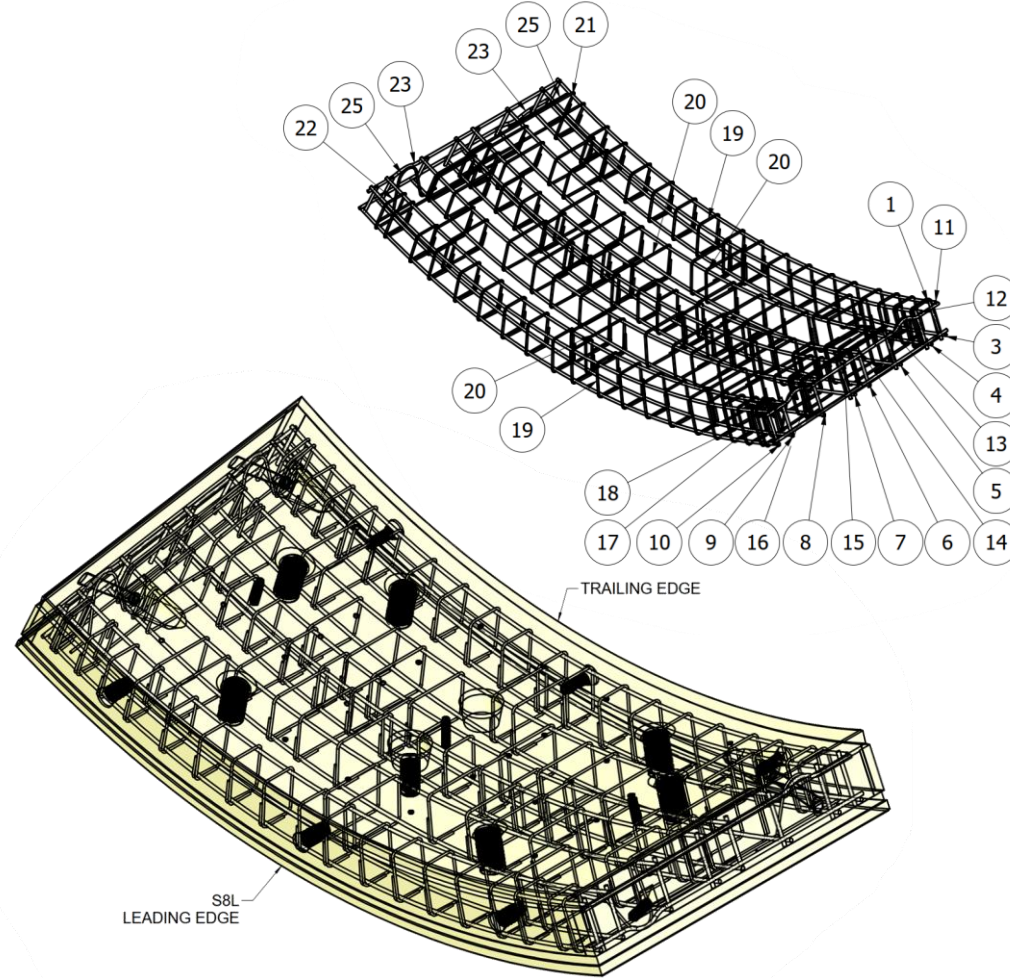
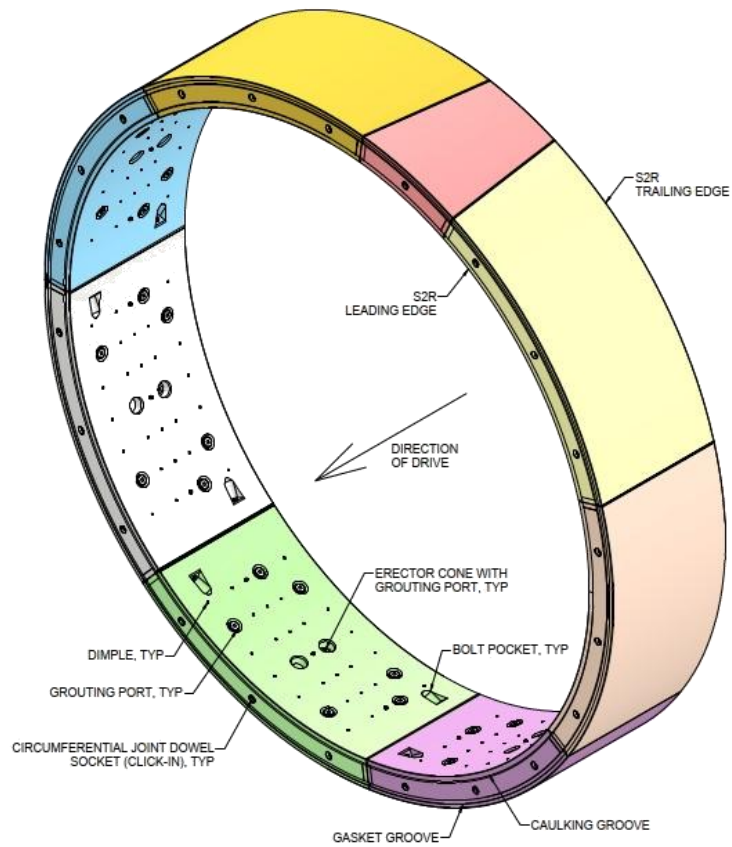
STRUCTURAL ANALYSIS

Analysis and design of cable-supported structures, bridges and buildings



FORMWORK DESIGN

Detailed design and endorsement of complex system and custom formwork



ITEM	REBAR SCHEDULE	SHAPE	QUANTITY (LBS)										BAR UNIT WEIGHT		TOTAL WT (LBS)
			NO. OF REBARS	NO. OF TIES	NO. OF WELDS	NO. OF LAPS	NO. OF CUTS	NO. OF BENDS	NO. OF SPLICERS	NO. OF COUPLERS	NO. OF OTHERS	NO. OF TOTALS	NO. OF TOTALS	NO. OF TOTALS	
1	S2R - 1/2" STRAIGHT BAR L008		100										100	100	100
2	S2R - 1/2" STRAIGHT BAR L008		100										100	100	100
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SHOP DRAWING PRODUCTION

Creation of



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THANK YOU

