



Name: Jayasankar K.R
Date of Birth: 24-11-1977
Marital Status: Single
Contact Address: Second Floor, House No.8/1, 4th Street, Elango Nagar, Padi, Chennai, Tamil Nadu -600 050, India
Nationality: Indian
Email: jayasankarkr@yahoo.co.in,
Tel/Mobile: +91-9995387289
Total years of experience: 16+

Key Qualifications:

Analytical and decisive Civil and Tunnel Engineer offering more than 16 years of extensive experience within various sectors. Possess in-depth, hands-on experience in directing multiple tunnel construction activities. Skilled in providing independent, technical oversight of the contractors build activities and pro-actively report all discrepancies and non-compliances from defined requirements, processes and procedures to the contractor. Recognized for meeting industrial and client guidelines and implementing the quality management systems to ensure compliance with specification and standards.

Technical Proficiencies:

Precasting Works | Concreting works| TBM Tunneling| Earthworks | Track works| Non Conformance Management| Concreting works | Construction Supervision | Document Control | Statistical Process Control | Compliance Checking | Utility Relocation | Work Permit | Risk Mitigation | Slope Protection Works | Grouting | Knowledge of International Standards- UIC, DB, ADIF, NFPA,ACI, ASTM, BS, EN, JSCE | Slope Protection works | Geotechnical Investigation | Inspection Logs | Test Results Analysis | Method Statement & ITP| Site Meetings | Site Safety Management | In-Process Inspection| Bored Piles| Diaphragm Walls| Sliding Resistant Piles| Ground Improvement| Drainage| Dry & Wet Utilities| Temporary Works| Sprayed Concrete| Environmental Management| Technical Coordination| Quality System Audit| Technical Audit| Quality Assurance/Quality Control| Structural Steel works| Ballastless Track | Earthworks| Interface Management | Geotechnical & Building Instrumentation| NFPA 130| Railway Stations & Maintenance Depots|

Experience Record:

Services duration	November, 2018 - Present
Company/GOV Institute	Yooshin Engineering Corporation JV
Position Held	Project Engineer
Name of the Project (Nature of Duties)	Design & Build Project of highway sub-sea tunnels in Mumbai City, India, Project Cost 1.7 billion USD., Package IV 3.93 KMs <ul style="list-style-type: none">• Single handedly controlled preliminary works at the site associated with setting up of site office, Demolition of existing buildings, Geotechnical Investigation works in reclamation area, temporary bund cum access road, bund wall for TBM Launch Shaft Protection against tidal waves... etc. and ensured works were completed on time.

- Coordinated with various stake holders related to works execution like Govt. Authorities, Local residential associations, Contractors – Topography Survey Team, Existing Building Condition Survey Team, Design & Execution ...etc.
- Provided technical support in construction in planning, quality control, interpretation of design, application of construction methods, resolution and documentation of design conflicts and constructability reviews to ensure successful job completion.
- Attended and shared suitable solutions for early resolution of issues in various third-party utility agencies- contractor interface meetings.....etc.
- Was in-charge of Supervision of Construction of TBM Launching Shaft [120m x 43m] and Cut and Cover Tunnel Portion Support of Excavation Works- 320m x 40m [Secant Piling].
- Shaft excavation works by Drill & Blast, Strand anchoring, Installation of rock bolts and shotcreting works completed in time.
- Blasting works were carried out without any issues to third party properties.

Services duration December 2016 – October, 2018

Company/GOV Institute N/A

Position Held Self Employed & Studies

Name of the Project (Nature of duties)

- Developing markets for waterproofing seals, tender follow up
- Done certifications from CIVITAS 2020 Project, European Union

Services duration August 2014 – December 2015

Position Held Independent Checking Engineer/Assessor (Line 1 Bored Tunnels)

Name of the Project (Nature of duties) **Riyadh Metro Railway Project** Client: BACS & AR Riyadh Development Authority
Main Project Features: BACS Consortium, Line 1 & 2 | Project Cost: 10 billion USD

Tactfully resolved highlighted issues in collaboration with Engineering Manager Tunnels, Bechtel (BACS Consortium) CWJV. Thoroughly evaluated bored tunnel and egress shaft design to ensure their completion in accordance with contractual standards and regulations. Skillfully utilized tracker spreadsheet while tracking comments given on deliverables to ensure timely closure. Reduced or prevented errors, delays, and cost overruns by conducting discrepancies analysis noticed during the review of design submissions and by contributing in constructability reviews for the proposed designs.

- Assured the quality of final deliverable through evaluating design gate certificates and gate reports.
- Checked design drawings to verify its consistency with calculation report and other definition drawings.
- Identified and timely dealt with compliances and non-compliances issues reported in the monthly ICE package assessment report.
- Notified BACS CWJV by summarizing and interpreting employer requirements compliance check status in BACS DOOR's requirements engineering spreadsheet.
- Verified the products meet quality expectations while procuring, through extensive inspection.

- Prevented or managed hazards associated with designs to ensure health and safety of human capital.

Services duration July 2011 – June 2014

Company/GOV Institute Egis India Consulting Pvt. Ltd

Position Held Senior Engineer- TBM Tunnels

Name of the Project (Nature of duties) **Chennai Metro Railway Project** Client: Chennai Metro Rail Limited
Main Project Features: JICA, Japanese Government funded |Project Cost: 3.28 billion USD, Phase 1 consists of Corridor 1 – 23.1KMs and Corridor 2 – 21.9KMs

Rendered services as senior engineer of the underground tunnel section, supported resident engineer for effectively managing tunneling works. Coordinated with contractor for speedy completion of building condition surveys, relocation/closure of tube wells/open wells in affected zone and verified delivered reports for accuracy. Supervised soil investigation tests on proposed tunnel alignment, installation of Shaft surface facilities, lowering of 3nos of tunnel boring machine parts, ground improvement work, and construction of 3nos of Concrete Confinement works and maintained quality throughout the project. Performed quality control checks as per Inspection and Test Plan as well as ensured compliance with environmental, safety & health requirements through monitoring, safety walks, surveillance checks.

- Significantly participated in the tensile strength, elongation, water tightness test of EPDM precast tunnel gaskets at CIPET, Chennai lab and full-scale testing of Steel Fiber Reinforced Tunnel Segments at IIT Chennai.
- Monitored the tunnel boring machine drive and its parameters to keep on a controlled route along the design tunnel axis.
- Played key role in the resolution of site issue related to quality & safety while attending weekly progress meetings along resident engineer with contractor. Notified executives by drafting shift reports and contractor surveillance reports on specific checks carried out on works done by contractor.
- Established and regularly maintained TBM Parameters Spreadsheet as well as key performance indicators. Utilized technical skills while supervising Robbins TBM Drive below Coovum river (first under river rail tunnel in India) and sensitive buildings.
- Calculated & analyzed TBM Utilization Percentage and Specific Energy of Excavation for the entire Robbins TBM Drive on mixed face alignment to have better understanding of the drive.
- Facilitated Robbins (TBM Manufacturer) site geologist in conducting geological face mapping at regular intervals to understand face stability due to observed heterogeneity in weathering on the face.

Services duration December 2010 – April 2011

Company/GOV Institute Obermeyer Planen + Beraten GmbH, Munich, Germany

Position Held Supervision Engineer

Name of the Project (Nature of duties) **Chengdu, Chongqing Passenger Dedicated Line Project, China** Client: Ministry of Railways, China

Main Project Features: High Speed Railway Project, Design Speed 350kmh

- Strictly adhered with MOR China guidelines while developing construction project management system to achieve predetermined objectives of scope, cost, time, and quality.
- Administered all affairs of civil works, including construction of bridges, Drill and Blast tunnels, ground improvement works, slope protection works, earthworks, emergency shaft works.... Etc.

Services duration June 2009 – November 2010

Company/GOV Institute Canasoil Construction Inc

Position Held Freelance Consulting Engineer

Name of the Project (Nature of duties) **Main Line Project** Client: Indian Railways

Main Project Features: Implementation of state-of-the-art technology, Ballast Bonding

- Liaised with various approval authorities for implementation of the technology to streamline the process of project and to keep abreast with latest technology.
- Accommodated top engineer with advisory services and technical support throughout the project.

Services duration May 2007 – November 2008

Company/GOV Institute Bombela Civils Joint Venture Pty Ltd

Position Held Quality Engineer, Asst. to Quality Manager

Name of the Project (Nature of duties) Gautrain Rapid Rail Project, South Africa Client: Gauteng Province, South Africa

Main Project Features: 80KMs of Rapid Rail Line |Project Cost: 4 billion USD, Tunnel Link -Park Station via Sandton to Marlboro Portal – 15KMs, Airport link from Marlboro Portal to OR Tambo International Airport -19Kms, Midrand Link – 20.6KMs and Hatfield Link – 18Kms and 8nos Emergency Exist Shafts [Hilbrow, Riviera, Houghton.]

- Assisted in Implementing quality management system across the project as per project quality plan in order to meet customer requirements and enhance their satisfaction.
- Headed the quality control operation for precast yard -tunnel segments of a 3000mtr TBM tunnel.

Services duration May 2004 – March 2007

Company/GOV Institute Patil Pfeleiderer Track Systems Pvt. Ltd

Position Held	Senior Manager, Quality Control
Name of the Project (Nature of duties)	USBRL Project and Ballastless Track Project on Station Aprons & Tunnels Client: Indian Railways, Main Project Features: Provision of ballastless track inside tunnels, on washable aprons <ul style="list-style-type: none">• Planned and designed quality procedures, standards, and specifications of construction project and actively monitored the Rheda 2000 Ballastless Track execution process.• Warranted the project meet quality standards by implementing quality system at project sites.
Services duration	January 2004 – May 2004
Company/GOV Institute	Sir Owen Williams Innvestment Ltd
Position Held	Junior Design Engineer, Highways
Name of the Project (Nature of duties)	Kottayam, Nedumbassery Extension State Highway Project , Client: Kerala Road Fund Board, PWD Kerala, Location: Kottayam, India Main Project Features: Project Corridor length is 53kms which serves as a shortest route to Kochi International Airport <ul style="list-style-type: none">• Harnessed in-depth knowledge and systematically prepared inception, Interim and Final DPR.• Conducted situation analysis covering project road inventory & condition Survey, quantity survey, and social-economic data collection for seamless working operations.
Services duration	December 2002 – December 2003
Company/GOV Institute	Malabar Cements Ltd
Position Held	Engineer -Temporary Post
Name of the Project (Nature of duties)	Cement Plant Maintenance Client: Malabar Cements Ltd, Location: Palakkad, India Main Project Features: Maintenance of existing cement plant, Installed capacity 4.2lakhs tonnes of Cement per annum <ul style="list-style-type: none">• Continuously improved, streamlined and clarified processes to ensure positive functional outcomes.• Led and administered cement plant maintenance works and staff quarters for ceaseless working.
Services duration	January 2002 – December 2002
Company/GOV Institute	Navayuga Engineering Company Ltd
Position Held	Site Engineer

Name of the Project (Nature of duties) **Pennar River Bridge Project, Nellore Bypass Project on NH-5** Client: National Highway Authority of India, Location: Nellore, India

Main Project Features: 3lane- 2nos bridges – 1.89Km, 4nos ROB's, 10nos Under Passes and 6nos minor bridges.

- Spearheaded and supervised the 1.5m dia bored pile foundation works for continual functional excellence.
Ensured balance between requirements and solutions by timely performing the quantity surveying.

Services duration June 2000 – June 2001

Company/GOV Institute NH Sub-Division

Position Held Civil Engineer

Name of the Project (Nature of duties) **Detailed Project Report Preparation Bypass for Palakkad Town** Client: National Highway Subdivision, Palakkad, Location: Palakkad, India

Main Project Features: Route makes use of existing roads and strengthening measures were proposed for flexible pavements

- Proficiently conducted project road inventory and condition survey of bridges and Soil & Material surveys.
- Leveraged key engineering skills for the appropriate designing of pavements and T- Beam Bridge.

Education:

- B. Tech, Civil Engineering, University of Calicut, India, 2001

Certifications:

- Six Sigma Green Belt, British Standards Institution, 2010
- Certified in Railway Infrastructure & Track, Cetren Formacion S.L, Spain
- Internal Auditor ISO/IEC 17025 – Laboratory Quality Management System, Bureau of Indian Standards, 2010
- Certified Reliability Professional, Center for Reliability, 2010
- Lead Auditor – ISO 9001:2015 Auditor Transition Course, British Standards Institution, 2016
- Lead Auditor – ISO 9001:2008, British Standards Institution, 2009
- Lead Auditor – OHSAS 18001, British Standards Institution, 2009
- Internal Auditor Integrated SHE Management System, Det Norkse Veritas AS, 2009
- Quality of Public Transport Interchanges – the customer point of view (BETA Version), CIVITAS, European Union, 2017
- Traffic and Mobility Fundamentals, CIVITAS 2020, European Union, 2017

Trainings:

- Training, Basic Tunnel Training Course, General Consultants, Chennai Metro Rail, India
- Training, PLAXIS 3D Tunnel, CADDSYS Pvt. Ltd, India

- Webinar, Reducing Risk: How to Manage the Unknown in TBM Tunneling, The Robbins Company
- Webinar, Performance under pressure: Robbins EPB TBM's, The Robbins Company
- Training, High Speed Railway Track Construction, Nurnberg-Ingolstadt High Speed Line, Bavaria, Germany
- Training, Precast Concrete Sleeper Production at Coswig, Langen, Leipzig Concrete Sleeper Plants Rail one Pfeleiderer Track Systems, Germany
- Training, Vossloh Rail Fastenings System in Werdohl, Germany
- Training, Precast Tunnel Segment Mould Checking, Boksburg, South Africa, CBE, Paris, France
- Training, E-Doc, Bombela Civils Joint Venture Pty. Ltd, South Africa.....

Professional Affiliations:

- AFTES, France, 2012 | ASTM, 2008 | IABSE, Switzerland, 2004 | ACI, 2008 | AREMA, 2008|JSCE, 2013

Computer Skills:

- MS-Office, MS Project AutoCAD, Staad-Pro, Bridge LCC, Drip 2.0, Hiperpave, Life 365, Holcim Software, DOORS, MS Excel – Expert, MX Road – Bentley Systems, MS Visio, Minitab 15, E-Doc, Aconex, Betonlab Pro (LCPC). Plaxis 3D Tunnel.

Publications:

- Durability of Stainless Steel-Clad Rebar in Aggressive Environments, EUROCORR 2006, European Corrosion Conference, Netherlands.
- Stainless Steel Rebar for Concrete Structures, NACE International Conference Corcon, New Delhi, 2004

Languages:

	<i>Language</i>	<i>Speaking</i>	<i>Reading</i>	<i>Writing</i>
1	English	Excellent	Excellent	Excellent
2	German	Fair	Fair	Fair
3	Spanish	Fair	Fair	Fair