

# **Role Profile**

Rendel Limited, an Ingérop company, is a multidisciplinary international design and engineering consultancy firm. We provide customer-focused engineering and technical solutions to clients on major engineering construction projects worldwide including major bridges.

We are involved in schemes through their full life-cycle including development; planning; detailed design; independent design checking; value engineering; technical advisory; erection engineering and construction supervision services. Rendel's origins date back to 1838, making us one of the oldest civil engineering consultancy companies in the UK.

We are proud of our track record of success in global construction markets, providing technical solutions for many complex infrastructure projects, notably bridges, geotechnical, highways, ports and maritime, rail systems and tunnels.

JOB TITLE	Technical Director - Bridges
LOCATION	London
TRAVEL	A willingness to travel is essential
MINIMUM REQUIREMENTS	<ul> <li>Chartered Engineer [C.Eng, MICE, IStructE] through a recognised institution</li> <li>Bridge Engineering experience on large, complex projects</li> <li>Experience in major bridge assignments for a range of Clients and bridge types in various construction market sectors</li> </ul>

## **JOB DESCRIPTION**

#### **DUTIES AND RESPONSIBILITIES**

- Undertake, lead, manage and deliver assignments in the UK and overseas
- Provide, assist and support the development and maintenance of a high level of technical capability to deliver the services
- Deliver innovative engineering solutions and report results to line managers and clients
- Undertake structural design and analysis using high-end analysis and design software across a broad range of bridge structural types, including long span bridges and using various international standards
- Team leadership, design and management experience on major road, rail, high speed rail or metro bridges, viaducts, river and marine crossings.
- Have sound technical experience in delivering bridge schemes featuring the design, design checking and erection engineering of specialised bridges such as cable stayed, balanced cantilever, span-by-span, incremental launching and arch using international codes, standards and best and practice.
- Project leadership experience with major schemes involving post-tensioned segmental, steel orthotropic and steel-concrete composite bridge design, checking and erection would be essential.
- Monitor staff time and budgets against assignment programme and agree appropriate actions where necessary
- Lead the management of the design office process that may include other related design disciplines
- Lead the coordination of design as part of an internal team and liaising with external associated professionals and our clients
- Assist in the planning and organisation of resources, to maximise fee income and resource utilisation
- Adopt procedures for standardisation of work products and deliverables, and peer review to ensure consistency and excellence in service delivery of the Company's technical work product
- Implement and adhere to Company procedures in the management, delivery and administration of Services
- Assist in sourcing and developing business opportunities, securing business and developing client relationships
- Maintain strong relationships with other disciplines within the firm



- Assisting with the organisation and management of the technical staff, acting as a line manager, supporting staff recruitment, training, CPD and implementation of 'Best Practice' and procedures
- Assist Graduates through the processes and requirements for completion of their Chartership
- Embrace organisational change and influence others to modify behaviour and attitudes
- Have an understanding and awareness of the company values and business plan and your contribution to both
- Observe and maintain Company Health & Safety Policy and Environment Policies across all activities
- Undertake other reasonable duties as requested

#### **PERSON SPECIFICATION**

# **KEY EXPERIENCE AND QUALIFICATIONS**

- Degree qualified Civil Engineer; post graduate qualifications would be highly preferable
- UK Chartered in a relevant discipline [C.Eng, MICE, IStructE]
- Working knowledge of structural processes and design, with a particular emphasis on data interpretation, design & analysis, construction and advanced modelling using specialised high-end software.
- Extensive knowledge of Eurocodes, AASHTO and other national and international industry standards, contracts, methodologies, procedures and best practice.
- Experience of computer analysis of structures and design of structural elements in common materials i.e. steel,
   steel orthotropic, concrete, post-tensioned, composite, fibre reinforced concrete, UHS concrete and CFRP.
- Experience predominantly in large scale (c.£100m+), high profile infrastructure projects, for a range of UK and international Clients in various construction market sectors, including Design & Build projects.
- Experience in the design and construction engineering of specialised bridges such as segmental, arch, extradosed, balanced cantilever, span-by-span, incrementally launched and cable stayed bridges would be considered highly advantageous
- Familiarity with the use of high-end proprietary software for the analysis and design of long span bridges
- Experience working on major bridge construction and modern bridge erection works and construction techniques would be considered advantageous
- People management experience e.g. general employee welfare, carrying our appraisals, training and development, involvement in resourcing and recruitment activities

### **COMPETENCIES**

- **Technical:** Excellent skills and knowledge, able to provide clear direction and undertake tasks in a cogent manner while sharing their expertise
- **Communication:** Strong interpersonal skills; ability to communicate, listen and influence all levels of people effectively. Excellent reporting / writing and strong presentation skills; able to adapt technical message to audience including multidisciplinary internal and client-side teams
- Critical Thinking: Ability to think and act operationally and strategically, able to respond quickly to changing
  circumstances whilst maintaining a clear view of overall priorities. Ability to work well under pressure and
  ensure deadlines are met, whilst maintaining a high quality of work
- **Team:** Excellent team working skills; able to lead, contribute to and collaborate with multi-disciplinary teams in a matrix environment
- Leadership: Demonstrates high standards, involves the team and drives it to listen to, interpret and exceed client expectations. Strong coaching and mentoring skills to train, develop and give constructive feedback to other engineers and technicians
- Project Management: Results orientated with a strong drive to deliver success, a proven ability to manage medium/large budgets, projects and programmes of work to agreed targets and priorities. Able to clearly communicate objectives and make timely, rational decisions with the information available and learn from successes and failures



## **IT SKILLS**

- Knowledge and experience in structural analysis/finite element software such as:
  - LUSAS
  - MIDAS
  - RM Bridge
  - SAM
  - CSi Bridge/ SAP2000
  - LARSA4D
- Excellent Microsoft Office abilities (particularly Excel)
- Familiarity with managing projects involving 3D BIM

## PERSONAL STYLE AND BEHAVIOUR

- Self-motivated and committed, with a high degree of integrity
- A team player and team leader who seeks to positively contribute to the working group with a collaborative attitude
- Convincing in terms of a capacity to translate objectives into effective practical steps
- Able to perform effectively within changing environments; demonstrates willingness and flexibility of availability to meet business needs
- Demonstrates a strong need to achieve, setting high standards for self and others. Committed to the value of own role, takes initiative and focuses on improving business performance
- Commitment to own personal development and that of teams under their line management