

## Role & Responsibilities of the Resident Engineer in FIDIC 1999 Contracts

Many construction projects suffer delays and cost overruns due to poor project management, often attributable to lack of knowledge and experience regarding site supervision and contract administration duties. One of the main causes for poor project delivery on FIDIC contracts is that the role and responsibilities of the Resident Engineer are not properly understood by those concerned.

With a view to highlighting the importance and crucial role of the Resident Engineer, for successful delivery of any public infrastructure project, the Construction Industry Development Board (CIDB) organised a half-day Workshop on the “Role & Responsibilities of the Resident Engineer under FIDIC 1999 Contracts”. The event was held on Thursday 27 October 2022 at Flying Dodo, Bagatelle. It was attended by contractors, consultants and public bodies concerned with the theme of the Workshop. The Workshop was conducted by Mr Amarnath Boyjoo, a Registered Professional Engineer of Mauritius, having extensive experience in site supervision and contract administration duties. Some of the main issues presented during this event are listed below.

- a) The Resident Engineer is a skilled professional who is called upon to drive a project on behalf of the Employer. The Resident Engineer is responsible for the successful implementation of the project. He must administer the contract effectively and ensure that all contractual provisions are being complied with. Unfortunately, the role and responsibilities of the Resident Engineer, particularly in public sector projects where the Resident Engineer may be a public officer, are often not well understood.
- b) The duties and authority of the Engineer are set out in Clause 3 of the FIDIC 1999 (Red Book) Edition. The Engineer is the Employer’s agent as well as an independent professional but does not have unfettered powers. For example, he has no authority to amend the contract and cannot relieve anyone of any duty, obligation, or responsibility under the contract.
- c) The Engineer plays different roles under the FIDIC 1999 Red Book. He can be the Employer’s agent, project manager, contract administrator, designer, reviewer, approver, quality controller, valuer, certifier, and quasi-mediator for the contract.
- d) Pursuant to Sub-Clause 3.2, the Engineer may assign duties and delegate authority to assistants. The Resident Engineer is an assistant to the Engineer, and therefore his decision(s) may be reversed by the latter.
- e) At the start of the contract, the Resident Engineer must convene a first site meeting with the Contractor to discuss key issues regarding performance of the contract, including personnel deployed, mode of communication, statutory requirements, performance security, insurance covers, applications for payment, planning of works, site mobilisation, materials for the works, site, environmental matters, and inspection of works, among others. The Resident Engineer should quickly draft the minutes of meeting, be factual in his write-up, and then issue those minutes promptly to the Contractor.
- f) The Resident Engineer is required to check documents submitted by the Contractor. For example, the Resident Engineer should check the authenticity of the document submitted by the Contractor as Performance Security under Sub-Clause 4.2, and whether it is compliant with the contract. The Resident Engineer is also required to verify the advance payment guarantee submitted by the Contractor under Sub-Clause 14.2.
- g) The Resident Engineer is required to check whether insurance documents (Clause 18) submitted by the Contractor are contractually sound. The three main types of insurance covers to be submitted by the Contractor are Insurance for Works and Contractor’s Equipment, Third-party Insurance and Insurance for Contractor’s Personnel. The first type of insurance cover is in the joint names of the Employer and Contractor, and the insured parties are unable to claim against one another in respect of an insured loss, as they are considered to be one-and-the-same for the purposes of the insurance. The second type of insurance cover is against each Party’s liability for any loss, damage, death, or bodily injury which may occur

to any physical property or to any person, which may arise out of the Contractor's performance of the Contract. The third type of insurance cover is in the name of the Contractor, and compensates the Contractor's employees for bodily injury, wages, and medical expenses. This insurance is usually taken on a yearly basis.

- h) In line with provisions of the Building Control Act and the Economic Development Board Regulations, Property Development Schemes (PDS) and Smart City Schemes require the promoters to take an Inherent Defects Insurance (IDI), commonly referred to as the Decennial Liability Insurance.
- i) Under Sub-Clause 8.3, the Contractor is required to submit a detailed programme to the Engineer. A programme is not a Contract Document. It is the Contractor's planning tool. It is neither for approval nor for consent by the Engineer. The programme should show the order in which the Contractor intends to carry out the Works, including the sequence and timing of inspections/tests, methodology and resources. A programme should have a Commencement Date, Completion Date, Durations (in-built floats), programming logic, critical path, floats, predecessors, successors, resources, calendar and sectional completion (if any). The Engineer can only give his comments, stating the extent to which the programme does not comply with the Contract. Under Sub-Clause 3.3, the Engineer may issue instructions to the Contractor which may be necessary for the execution of the Works.
- j) Under Sub-Clause 7.3 the Contractor is required to give notice to the Engineer whenever any work is ready. The Engineer shall then either carry out the examination, inspection, measurement or testing without unreasonable delay, or give notice to the Contractor that the Engineer does not require to do so.
- k) According to Sub-Clause 14.3, applications for payment (the Statement) shall be submitted by the Contractor *"in a form approved by the Engineer"*. The Engineer shall verify the Statement and issue to the Employer an Interim Payment Certificate (IPC) which shall state the amount which the Engineer *"fairly"* determines to be due.
- l) Under Sub-Clause 3.5, the Engineer has to make a *'fair determination'* (if he cannot find an agreement with both parties) in cases in which Sub-Clause 3.5 is referred to in the relevant clause of the 1999 Red Book. In these cases, the Engineer has a quasi-judicial (impartial) role.
- m) According to Sub-Clause 11.2, the Engineer may issue a Taking-Over Certificate for any part of the Permanent Works, including a list of outstanding works, to be handed over to the Contractor.
- n) Pursuant to Sub-Clause 11.9, performance of the Contractor's obligations shall not be considered to have been completed until the Engineer has issued the Performance Certificate to the Contractor, stating the date on which the Contractor completed his obligations under the Contract. Only the Performance Certificate shall be deemed to constitute acceptance of the Works.

In conclusion, the Resident Engineer draws his role and responsibilities from the Engineer. He not only needs sound engineering skills to manage the project, but he also needs excellent soft skills to manage his team and the relationship with the Contractor's team. His objective is to successfully drive a project from start to finish.

***FIDIC Publications (Conditions of Contract) may be purchased at the offices of the Association of Consulting Engineers (ACE) Mauritius (c/o Pro-Five Ltd) at The Axis Building, Ground Floor, 26 Bank Street, Cybercity, Ebene. ACE Mauritius may also be reached on 467-7015, or by e-mail at [admin@acemauritius.mu](mailto:admin@acemauritius.mu).***

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