

# REHABILITATION OF RAHCO RAILWAY BRIDGES AND CULVERTS

## MANDATE

The mandate was to execute the detailed engineering design necessary to rehabilitate over 400 Central Railway Line bridges and culverts between Dar es Salaam and Isaka to accommodate rolling stock transporting 20- and 40-foot containers between Dar es Salaam and Isaka with an 18.5-tonne/axle load operating at speeds of up to 75 km/h.

## DESCRIPTION

The mandate included the following activities:

- Detailed inspections of the structures targeted for rehabilitation, including topographical and hydrographic surveys;
- Geotechnical investigations at areas showing evidence of soft soil;
- Detailed hydrological and hydraulic study to address chronic scour problems at various bridge sites;
- Engineering design for the rehabilitation of concrete and steel superstructures, including span replacements, steel member repairs, bearing rehabilitations and bridge deck repairs;
- Rehabilitation design for bridge substructures, including sheet piling, reinforced concrete jacketing, stone masonry repairs, etc.;
- Design of scour protection measures such as base slabs, riprap basins, stone pitching, gabions, etc.;
- Recommend a construction phasing and work packaging strategy;
- Prepare a complete set of integrated tender documents that incorporated both bridge and track works;
- Organized and led the bidders' meeting and site visit for potential contractors.

➤ **CONFIDENCE MOVES THE WORLD**



**CLIENT**  
RAHCO

**COUNTRY**  
Tanzania

**YEARS**  
2016-2017

**DURATION**  
9 months

**TYPE OF SERVICES**  
Infrastructure design

Freight & Mining