



## DESIGN AND SUPERVISION OF FIVE BRIDGES: TIMOR LESTE

Located South East along A08 National Road

Client: United Nations Office for Project Services

### SUMMARY:

**Value:** €6.5 million  
**Status:** Construction Completed (2008)  
**Finance:** UNDP / EU  
**Contractor:** Penta Ocean Co.Construction Ltd.

### Services Provided:

- Project Management / Preliminary Investigations
- Structural Engineering/ Design Management
- Geotechnical Investigations and Design
- Hydrology & Hydraulic Design
- Social and Economic Assessment
- Project Control/ Procurement Management
- Control of Supervision Services

### Narrative Description of Project:

- Design of 5 No. bridges along the A08 National Rd in the districts of Viqueque & Lautem.
- Bridge spans of 35, 40 and 50 m with a total bridge length of 410m
- Typical cross-sections for each bridge is dual lane (2 x 3.0m) carriageways with a 1m footpath
- Bridges are Steel Truss covered propriety systems suitable for launching during periods of high river flows and flash floods. Abutments and piers on reinforced concrete founded on steel driven piles
- Construction of access embankments to bridges & extensive river training and scour protection

### Description of Actual Services Provided by Staff:

- Review of current and completed studies relevant to the project
- Topographical and Geological site investigations & hydrology and hydraulic modelling
- Environmental and Socio Economic Assessment
- Complete Design of bridge super and substructures
- Assistance with complete works procurement process including tender prequalification & evaluation
- Supervision as Engineer to the contract on UNOPS Standard conditions of contract
- Progress monitoring, financial management, quality control and claims management.
- Final measurements of completed works and provisional and final acceptance of works.

