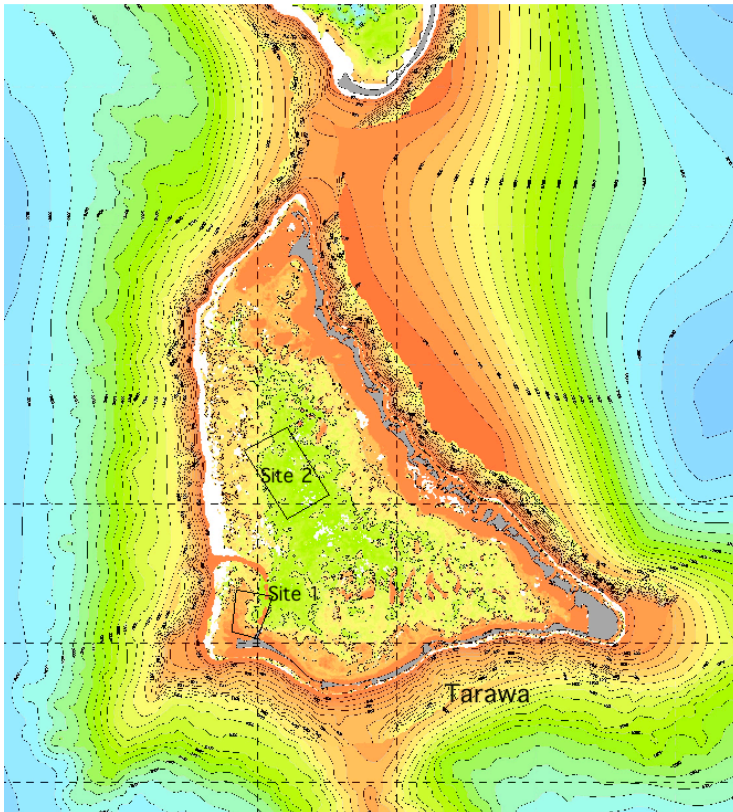
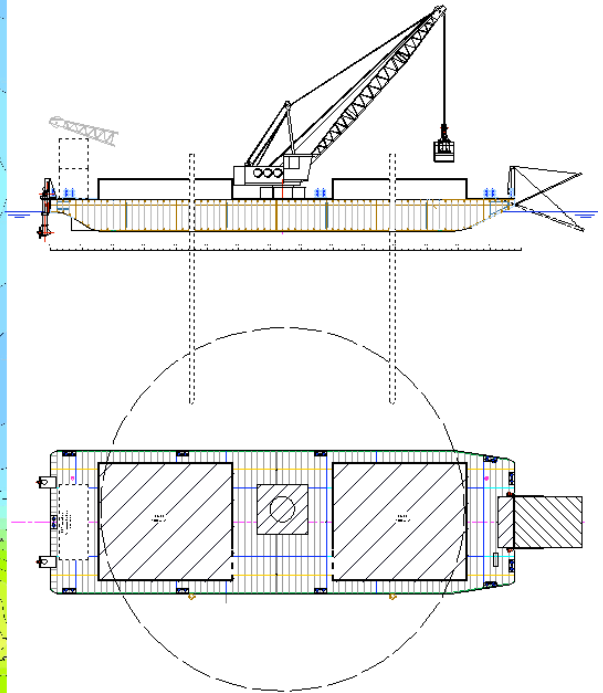


## Engineering options and solutions to establish Tarawa's (Kiribati) proposed offshore aggregate dredging company



Tarawa island (Kiribati) source; Sopac report 2007



Proposed pontoon layout

The South Pacific Applied Geoscience Commission (SOPAC) currently executes the European Development Fund (EDF) project Reducing Vulnerability in Pacific ACP States. The project is intended to reduce Pacific ACP state vulnerability to natural disasters along the coast through the development of an integrated planning and management system, which targets:

- hazard mitigation and risk assessment;
- aggregates for construction; and
- water resources and sanitation.

The key thrust of the project is to work with participating countries to:

- assess aggregate resource supplies and thereby mitigate the impact of unsustainable aggregate mining; and
- investigate and raise awareness about coastal processes.

DEMAs contributed to the project by assessing the dredging demand and proposing a sustainable method to dredge the aggregate with maximum participation of the local community in the downstream handling of the aggregate. The design of a grab dredge on a self-propelled pontoon was chosen to be the most economic option with the necessary flexibility to dredge and transport the aggregate.

The design was optimised to allow for discharging by the grab crane or by a pay loader over a ramp at the bow.

### Client

South Pacific Applied Geoscience Commission (SOPAC)

### Location

The Netherlands & Fiji

### Year

2007

### Services

- technical assistance
- work method assessment
- equipment procurement

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