

# Coastal Processes Assessment for eCoast

## Malolo Island Resort

Western Viti Levu, Fiji



Left - Dimensions of proposed development overlying Google Earth image. Right - Concept plan for the foreshore area of the proposed development of Malolo Island Resort.

### INFO:

**Location:** Malolo Island, Western Viti Levu, Fiji

**Client:** Freesoul Real Estate Ltd

**Project Date:** 2018

### SCOPE OF SERVICES:

- Environment Impact Assessment and Mitigation Approach
- Coastal Process Analysis
- Bathymetry Survey
- Aquadopp Deployment
- Numerical Modelling
- Extreme Wave Event Analysis
- Coastal Hazard Assessment
- Design Recommendations

### PROJECT DESCRIPTION:

The objective of this study was to provide a preliminary coastal processes assessment directed at the overall potential impacts of the proposed development, and recommendations to mitigate any potential adverse impacts. The data retrieved from the Aquadopp was used to create and calibrate numerical models for considering flushing requirements for the mangroves and canal areas, underfloor forces on the proposed overwater bures, and to perform a Monte-Carlo coastal hazard assessment to support the determination of the finished floor levels and finished ground levels for the structures and reclamations. The findings of this study provided the relevant information to begin the evaluation process of the Environmental Impact Assessment and permit applications.