

MACAO SCIENCE CENTER (reclamation design)



Client / Employer Government of the Macao Special Administrative Region
Land, Public Works and Transport Bureau

Service Engineering Design Works provided by CONSULASIA, LDA.

Investment Approx. MOP 58 Million

Contract Price MOP 620,000

Time Schedule February 2005 to April 2005

Description of the Project The project involves the provision of engineering design of the reclamation of about 62,000 square meters of land formation at the waters adjacent to the Macao Cultural Centre, for the construction of the Macao Science Center and auxiliary facilities.



Initial Design of the
Land Formation of the
Macao Science Center

This project was a revision of an initial design which was concluded on 2003. After reconsideration of the initial project, it was revised and designed to complete the reclamation with a surcharge to a level of +6.0 MSL and the finish level at +4.5 MSL.

A rock slope protection with slope 3 to 1 (a sloping seawall) is planned to protect the perimeter of the front side part of the reclamation, and a concrete block sea wall is planned to the perimeter of rest of the reclamation.

Due to the very low cohesive strength of the marine mud layer, dredging is proposed for the foundation for both the rock slope protection and the concrete sea wall. Vertical drain is proposed to be installed at 1.2 m spacing with minimum length of 30 m with a minimum 1.5 m embedment into alluvium sand layer.

Zone with no surcharge: It is designed to complete the reclamation with no surcharge and with finish level at +4.5 MSL due to the complete dredging.