

Industry Practitioners Category

Construction Manager

Outstanding Award

WONG Wing-keung



Design, Build and Operate the First Stage of Tseung Kwan O Desalination Plant

This is the first desalination plant project using Reverse Osmosis technology in Hong Kong. I widely participated in the design and construction of some DFMA and MIC construction such as external wall construction, site office and an inspection corridor bridge. These are highly sustainable measures that I was participated and suggested. Other sustainable measures such as using reused paving panels for haul road, application of solar panels and energy recovery device are also applied to reduce carbon emission.



Sustainable Best Practice 1

In this project, there are 650 pieces of DFMA external wall panels designed. The total concrete volume is 1400 meter cube. According to the 5% wastage by in-situ method, 70 metre cube concrete wastage had been avoided. Also, 730 meter cube scaffolding erection and dismantling were also avoided.

Sustainable Best Practice 2

Site sustainable enhancement is my another achievement. By using excavated rockfill mixed with soil as backfilling material, reuse of concrete paving panels instead of using in-situ concrete to prepare for haul road and using longer time in the initial stage to form haul road to eliminate unnecessary generation of 750m long road debris are example to demonstrate my achievement.



Sustainable Best Practice 3

My another achievement is to construct a bridge corridor at ground level. Also, MIMEP is introduced into the corridor so the final product become a MIC. This is beneficial to the building service utilities inside be installed in a lower level instead of meal-pieces installation after the corridor is constructed in place. This is a favourable outcome with good communication between Civil and E&M team.