Hydraulic Fill Manual

There are many reference books and sources of information on dredging techniques and dredging equipment but very little has been written solely on planning, design and construction of land reclamation using hydraulic fill. This manual, a first of its kind, is an ideal reference for all involved in the development of such infrastructure projects. Written and reviewed by expert practitioners who have been involved in many such projects around the world, this manual provides a useful and practical overview and reference guide for clients, developers, consultants and contractors who are engaged in planning, design and construction of reclamation works.

A lot of hard work has gone into the development and compilation of this manual. It is our pleasure to be able to recommend this document to all those involved in the civil engineering and dredging industries.

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Hydraulic Fill Manual

Without proper hydraulic fill and suitable specialised equipment, many major infrastructure projects such as ports, airports, roads, industrial or housing projects could not be realised. Yet comprehensive information about hydraulic fill is difficult to find. This thoroughly researched book, written by noted experts, takes the reader step-by-step through the complex development of a hydraulic fill project.

Up-to-date and in-depth, this manual will enable the client and his consultant to understand and properly plan a reclamation project. It provides adequate guidelines for design and quality control and allows the contractor to work within known and generally accepted guidelines and reasonable specifications. The ultimate goal is to create better-designed, more adequately specified and less costly hydraulic fill projects.

The Hydraulic Fill Manual covers a range of topics such as:

- The development cycle of a hydraulic fill project
- How technical data are acquired and applied
- The construction methods applicable to a wide variety of equipment and soil conditions, the capabilities of dredging equipment and the techniques of soil improvement
- How to assess the potentials of a borrow pit
- Essential environment assessment issues
- The design of the hydraulic fill mass, including the boundary conditions for the design, effects of the design on its surroundings, the strength and stiffness of the fill mass, density, sensitivity to liquefaction, design considerations for special fill material such as silts, clays and carbonate sands, problematic subsoils and natural hazards
- Quality control and monitoring of the fill mass and its behaviour after construction

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*For full table of contents visit: www.crcpress.com/9780415698443

The Hydraulic Fill Manual is of particular interest to clients, consultants, planning and consenting authorities, environmental advisors, contractors and civil, geotechnical, hydraulic and coastal engineers involved in dredging and land reclamation projects.

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