

『港珠澳大橋 通訊』

及香港相關工程項目

Hong Kong-Zhuhai-Macao Bridge
and Related Hong Kong Projects

NEWSLETTER 2012·JULY

1

香港口岸工程採用嶄新 不浚挖式填海技術

「填海」二字總令人覺得海洋環境必定會受到重大影響。我們一般認識的填海方法，都是把海床下的淤泥挖走，然後用砂料回填，以穩固海堤的地基。在挖走和傾倒淤泥的過程中，海洋的生態環境及水質難免受到影響。

坐落於香港國際機場東北水域的港珠澳大橋香港口岸將會是一個以填海方式建造而成的人工島。其面積約為150公頃，而當中約20公頃的土地將用作興建屯門至赤鱸角連接路的南面出口處。由於填海規模頗大，若採用傳統的填海方法，將對該處的海洋環境構成較大影響。

其實，填海可以採用更環保的方法。為了符合可持

續發展的宗旨，路政署採用了嶄新的不浚挖淤泥填海方法來建造香港口岸人工島。這個填海方法基本上不需要浚挖及傾倒現有海床下的淤泥，故能大幅減低對海洋環境及生態的影響。此方法是將多個大直徑的鋼製圓筒插入海床，穿越淤泥層直至較堅固的沖積層，再以惰性建築廢料或砂料回填鋼圓筒內，從而構成穩固的海堤。由於整項填海工程毋需浚挖及傾倒淤泥，海水便不容易受到污染。

上述的不浚挖填海方法可節省數千萬立方米的回填物料，並將填海施工期間的海上工程交通量減至最少。這有助維護海洋生態，使工程符合可持續發展的概念。

New Non-dredge Reclamation Method for Hong Kong Boundary Crossing Facilities

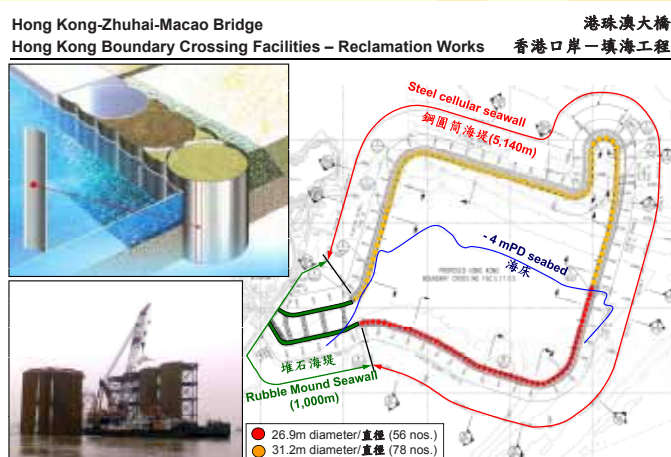
The word “reclamation” always gives us the feeling that the marine environment will be greatly affected. Our basic knowledge on reclamation is that the marine mud at the seabed is dredged and replaced by sand to form a firm foundation for constructing the seawall. During such dredging and dumping process, the marine environment and water quality will inevitably be affected.

The Hong Kong-Zhuhai-Macao Bridge's (HZMB) Hong Kong Boundary Crossing Facilities (HKBCF), located at the waters off the northeast of the Hong Kong International Airport, will be an artificial island of about 150 hectares (including about 20 hectares of reclamation for the Tuen Mun-Chek Lap Kok Link southern landfall) formed by reclamation. In view of the large-scale reclamation works, if conventional method of reclamation is adopted, it will create a comparatively greater impact on the marine environment.

Indeed, reclamation can be implemented in a more environmentally friendly way. To comply with the principle of sustainable development, the Highways Department (HyD) has adopted a new non-dredge reclamation method to construct the HKBCF. This reclamation method basically does not require

dredging and dumping of marine mud, and therefore will significantly reduce the impact on the marine environment and ecology. This method is to sink a series of large circular steel cells through the marine mud into a firm layer of alluvium underneath. These steel cells will be backfilled with inert construction and demolition materials or sand to form stable seawalls. Since there is no need for dredging and dumping of marine mud for the whole reclamation works, seawater will not be polluted easily.

Through the above-mentioned non-dredge reclamation method, several tens of million cubic metres of backfilling materials will be saved, thereby minimising the volume of marine traffic during the reclamation process. This can help preserve marine ecology and comply with the principle of sustainable development.



註：若想知道更多有關不浚挖式填海方法的資料，歡迎瀏覽本工程項目網頁：http://www.hzmb.hk/tchi/about_uniqueness.html。

For more information about the non-dredge reclamation method, please visit us at: http://www.hzmb.hk/eng/about_uniqueness.html .

香港口岸工程簡介

INTRODUCTION OF WORKS OF HKBCF

我們將以創新、美觀、符合能源效益、可持續發展等宗旨來設計和興建香港口岸。口岸人工島上將設有旅客檢查和出入境設施，如旅檢大樓、私家車和巴士過關檢查亭等；貨物檢查和過關處理設施，如貨車清關檢查亭、貨物檢查台等；各執勤政府部門（如入境事務處、香港海關等）的辦公地方；消防局及救護站；及維修設施等。

We are dedicated to designing and constructing the HKBCF based on the principles of innovation, aesthetics, energy efficiency and sustainable development. The artificial island will be furnished with passenger clearance facilities such as the passenger clearance building and processing kiosks for private cars and coaches, etc.; cargo clearance facilities such as cargo examination platforms, etc.; and offices of front-line Government departments (such as the Immigration Department, Customs and Excise Department, etc.); fire station-cum-ambulance depots; as well as maintenance facilities.



香港口岸的工程進度

PROGRESS OF WORKS OF HKBCF

香港口岸的填海工程已在2011年年底開展。承建商現正進行安裝大型鋼製圓筒的工作，包括在海床上鋪設土工布和碎石墊層，以及安裝用作鞏固海床的碎石樁柱。

The reclamation works of the HKBCF commenced at the end of 2011. The contractor is now proceeding with the installation of large circular steel cells, including the laying of geotextiles and stone blankets on the seabed, as well as the installation of stone columns to strengthen the seabed.

安裝石柱樁作業船

Barge for Installation of stone columns



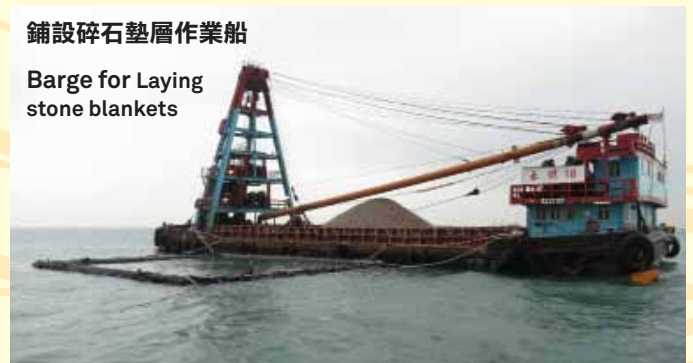
鋪設土工布作業船

Barge for Laying geotextiles



鋪設碎石墊層作業船

Barge for Laying stone blankets



上網即可獲得環境資訊

不論你身在家中、學校、辦公室或旅途上，都可以方便快捷地獲得本工程項目的相關環境資訊。港珠澳大橋本地相關工程項目的環境監察辦事處已在網上開設網頁，以提供本工程項目的環境資訊予公眾查閱。

你可以在這個網頁獲得最新的環境監測數據和報告，你亦可根據日期或監測數據的種類（如噪音、水質及空氣質素等），輕易搜索由工程項目開展以來的環境監測數據。這個網頁亦提供連結至與工程項目相關的環境影響評估報告、環境許可證及其他文件，助你便捷地取得相關資訊。

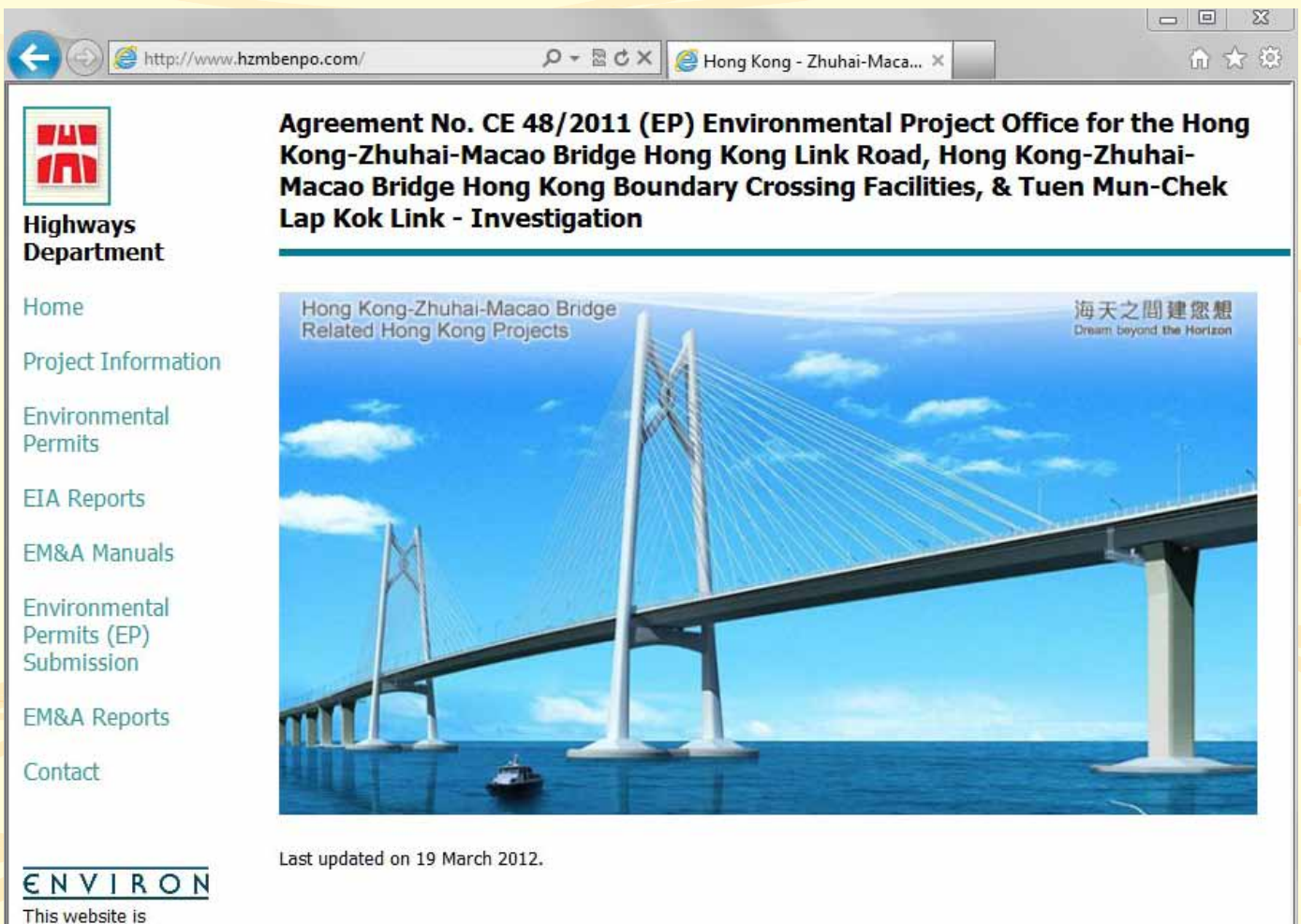
環境監察辦事處網頁的網址為<http://www.hzmbenpo.com>。你亦可從本工程項目的主網頁<http://www.hzmb.hk>內連結至該網頁。

Environmental Information in a "Click"!

Whether at home, at school, at work, or even on the move, you can now obtain environmental information related to the project in a convenient and speedy manner. A new website, set up by the Environmental Project Office of the HZMB local projects, is dedicated to providing such information of the projects, open to members of the public.

There you can find the latest environmental monitoring data and reports for the projects. You can also easily search for environmental monitoring data collected since the commencement of works by date or by type of monitoring data (e.g. noise, water and air quality). To help you find the environmental impact assessment reports, the environmental permits, and other environmental submissions related to the projects more conveniently, all the links to these documents are included on the website.

The website of the Environmental Project Office can be accessed directly at <http://www.hzmbenpo.com>, or through a link on the main website for the projects at <http://www.hzmb.hk>.



The screenshot shows a web browser window with the URL <http://www.hzmbenpo.com/>. The page title is "Agreement No. CE 48/2011 (EP) Environmental Project Office for the Hong Kong-Zhuhai-Macao Bridge Hong Kong Link Road, Hong Kong-Zhuhai-Macao Bridge Hong Kong Boundary Crossing Facilities, & Tuen Mun-Chek Lap Kok Link - Investigation". The page features a navigation menu on the left with links to Home, Project Information, Environmental Permits, EIA Reports, EM&A Manuals, Environmental Permits (EP) Submission, EM&A Reports, and Contact. The main content area displays a large image of the Hong Kong-Zhuhai-Macao Bridge with the text "Hong Kong-Zhuhai-Macao Bridge Related Hong Kong Projects" and the slogan "海天之間建夢想 Dream beyond the Horizon". The page footer includes the ENVIRON logo and the text "This website is" followed by a partially visible URL.

在整個港珠澳大橋香港工程項目的規劃及設計過程中，我們非常重視環境保護和生態保育。我們會採取一系列措施，以將工程對環境及生態保育的影響減至最低，及符合法例的要求。

為了進一步保護環境，我們將會在施工期間實施全面的環境監察及審核計劃。我們將於空氣質素、噪音、水質、廢物管理及生態等方面，監測有關環保措施的成效。

The Government attaches great importance to environmental protection and ecological conservation during the planning process of the HZMB Projects. A series of mitigation measures will be adopted to minimise impact on the environment and ecology, and to comply with the statutory requirements.

To further safeguard the environment, a comprehensive environmental monitoring and audit programme will be put in place throughout the construction of the projects to regularly monitor air quality, noise, water quality, waste management and ecology etc.



若你希望知道更多有關港珠澳大橋 工程項目的資訊，歡迎瀏覽本項目的最新網頁：

If you would like to know more about the HZMB Projects, please visit our new project website:

www.hzmb.hk

特別推介：

為了加深大家對本項目的認識，我們製作了五段涵蓋以下不同主題的短片。請瀏覽：

http://www.hzmb.hk/tchi/video_centre.html

第一集：港珠澳大橋—海洋篇

第二集：港珠澳大橋—自然篇

第三集：港珠澳大橋—經濟及生活篇

第四集：港珠澳大橋—民生篇

第五集：港珠澳大橋—設計及規劃篇

Special Highlights:

In order to help you better understand the projects, we have produced five short videos featuring different topics as set out below. Please browse:

http://www.hzmb.hk/tchi/video_centre.html

Episode 1: Conservation of Marine Ecology

Episode 2: Nature Conservation

Episode 3: Economy and Quality of Life

Episode 4: Livelihood

Episode 5: Planning and Design

市民若有意見、查詢或投訴，可透過以下方法送交我們：

Please send your suggestions, enquiries or complaints, if any, to us by the following means:

電子郵件 Email: hzmbenquiry@hyd.gov.hk

電話 Tel: 3586 9904

傳真 Fax: 3188 6614