

## Hong Kong - Shenzhen Western Corridor/Deep Bay Link Advance Enhancement Dredging Works at Mai Po

**H**ighways Department has awarded three contracts in mid-2003 for the construction of the fourth vehicular boundary crossing between Shenzhen and HKSAR. This link, comprising the Hong Kong-Shenzhen Western Corridor and the Deep Bay Link, will be constructed over Deep Bay waters and along Castle Peak at Northwest New Territories. The works are under an extremely fast-track programme as Shenzhen and HKSAR governments are expecting to see the route open to traffic by the end of 2005.

The Hong Kong-Shenzhen Western Corridor will run across a stretch of inter-tidal mudflat in Deep Bay which is an important foraging ground for birds. This area is of particular ecological importance during the winter months when it becomes a haven for migratory birds. There were grave concerns on impacts at this area although the Environmental Impact Assessment report concluded that the impacts would be insignificant after implementation of mitigation measures.

Another environmental issue related to this project is that the bridge piers may slightly increase the sedimentation rate at Deep Bay by locally disrupting the tidal flow. Existing sediment deposition is already causing a rise of the seabed level that affects the water exchange between the wetlands in Mai Po and Deep Bay. The Mai Po wetlands are also important habitats for birds and without the water exchange, they cannot support fish or shrimps which are the food resources for birds.

To contribute to the long-term benefit of Deep Bay ecosystem, the Environmental Impact Assessment report proposed an enhancement measure to dredge a water channel between the wetland and inner Deep Bay. The purpose is to restore the function of an area of Mai Po wetlands as core feeding ground for birds and to offset any effect of construction at the outer Deep Bay mudflat in the winter months. It was considered that the restoration target at inner Deep Bay is of higher cost-effectiveness, as more birds will be benefited.

This advance works started in August 2003. Owing to the onerous site constraints and difficult working conditions, a contractor with relevant experience and expertise was engaged to carry out the works. To deal with the unfavourable tidal conditions during the construction period and site constraints, working methods and deployment of resources were constantly reviewed. The works were ultimately completed timely at the end of October 2003 to enable Hong Kong-Shenzhen Western Corridor works to continue throughout the winter.

## 深港西部通道／后海灣幹線 米埔的恢復海床深度前期工程

**路**政署在 2003 年中批出 3 份工程合約，建造第四條連接深圳及香港的跨境行車通道。通道包括深港西部通道和后海灣幹線兩個項目，橫越后海灣並經過新界西北青山一帶。深港兩地政府都期望通道於 2005 年終通車，因此工程十分緊迫。

深港西部通道跨越位於后海灣的一塊潮間帶泥灘。該泥灘是一處重要的雀鳥覓食地。在冬季更是候鳥主要的棲息處。所以，雖然環境影響評估報告的結論是在採取紓緩措施後工程將不會造成太大的影響，公眾人士仍然對該區非常關注。

工程項目另一環境影響是橋墩可能局部減低后海灣潮水的沖刷能力從而輕微增加后海灣的沉澱率。現時后海灣的沉澱情況已令海床水平提升至阻礙了后海灣和米埔濕地之間的水流的流通。眾所周知，米埔濕地是鳥類的核心覓食棲息區。缺乏水流，雀鳥食糧如小魚、小蝦將難以生存。

為了讓后海灣的生態系統能長遠受惠，環境影響評估報告提出了一項疏浚連接內后海灣和米埔濕地水道的措施。目的在恢復一塊米埔濕地作為鳥類主要覓食地的功能，和補償冬季在外后海灣潮間帶泥灘施工對候鳥生活可能產生的影響。在內后海灣進行這項措施將會令更多雀鳥受惠而更具經濟效益。

這項前期工程於 2003 年 8 月動工。因水道工地和工程各方面有不少限制，我們聘用了對這類疏浚工作有經驗及專長的承建商。但因工程期間的潮汐時間並不配合工序及工地的各項限制，施工時還要不斷檢討施工方法及安排更多資源來配合。前期工程最終如期於 2003 年 10 月尾完工，使深港西部通道的工程於冬季得以繼續下去。



Dredging in Progress 挖掘工作進行中