



中九龍幹線的環境影響評估

Environmental Impact Assessment (EIA) of Central Kowloon Route

通告 Message

根據中九龍幹線的首選走線，我們已展開環境影響評估，工程研究及初步設計等工作。在今期通訊，我們會簡介環境影響評估的涵括範圍及屬於工程研究範圍內重要項目的土地勘測工作。

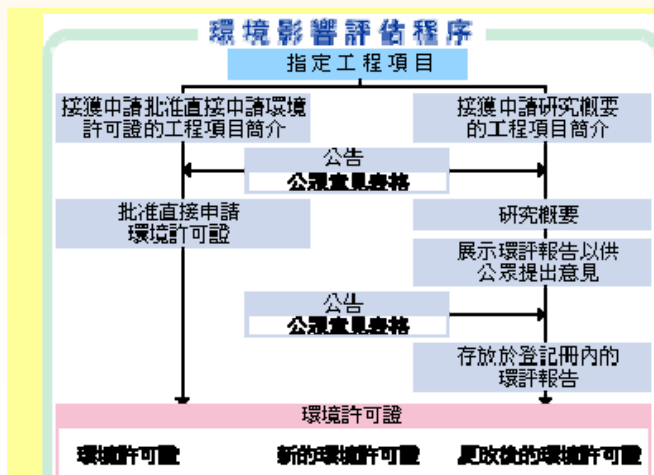
For the preferred alignment of Central Kowloon Route, we have commenced the Environmental Impact Assessment (EIA), Engineering Study and Preliminary Design, etc. In this newsletter, a brief introduction on the scope of EIA and the ground investigation works, which is one of the important works of the Engineering Study, will be presented.

中九龍幹線是一個在《環境影響評估條例》(第499章)附表2所列的指定工程項目，須要取得環境許可證才可建造及運作有關工程。路政署正進行綜合的環境影響評估研究。在環境影響評估條例下，中九龍幹線的施工及道路通行期間對環境的影響，須經過詳細評估，包括運用相應的紓緩措施，確認符合相關的環境要求，才可獲環保署發出環境許可證。環境影響評估範圍包括對噪音、空氣質素、土地污染、景觀及視覺、水質、貯存、使用或運輸爆炸品、文化遺產及廢物管理影響評估。

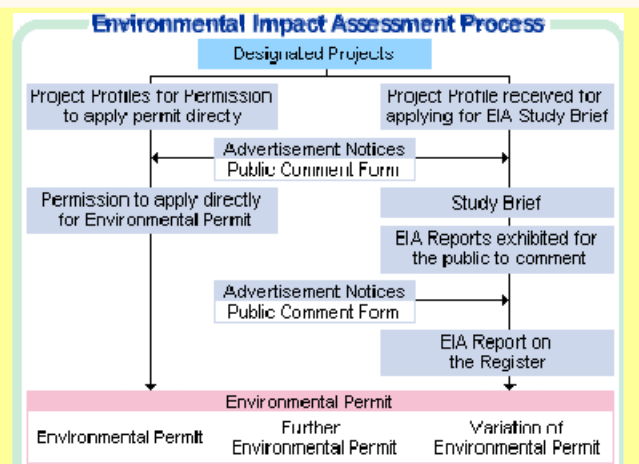
環境影響評估報告將於2009年中提交環境保護署。

The CKR is a designated project under Schedule 2 of the Environmental Impact Assessment Ordinance (EIAO) (Cap. 499), and an environmental permit is required for the construction and operation of the project. Highways Department is carrying out a comprehensive Environmental Impact Assessment (EIA) Study. Under the EIAO, the CKR construction or operation has to meet various environmental requirements by detailed assessment and adoption of mitigation measures where necessary before the environmental permit is issued by Environmental Protection Department. The EIA study will address the key issues including noise, air quality, land contamination, visual and landscape, water quality, the storage, use or transport of explosives, impacts on the historic buildings and structures and waste management implications arising from the project.

EIA report will be submitted to Environmental Protection Department in mid 2009.



節錄自環保署網頁



Extracted from Environmental Protection Department's Website



水質 Water Quality



空氣質素 Air Quality

危險評估 Hazard Assessment

土地污染 Land Contamination

文化遺產 Cultural Heritage



量度噪音 Noise Measurement

景觀及視覺影響 Landscape and Visual Impact

廢物管理 Waste Management

環境影響評估條例 Environmental Impact Assessment Ordinance (EIAO)

環境影響評估條例在1998年4月開始生效，所有指定工程項目均需要按照法例規定的環境評估程序，評估工程的影響。在這個條例下，工程動工前須先取得環境許可證。環保署署長如果認為工程策劃者的環境評估報告已符合環評研究概要和環評程序技術備忘錄的規定，並已擬定足夠措施去避免或減低工程對環境的影響，便會批准該環評報告。

指定工程項目是指可能引起不良環境影響的工程項目或擬議工程項目。此等工程項目屬於條例管制範圍。

EIAO has been in effect since April 1998. All designated projects must go through the statutory EIA process to assess their impacts. Under this Ordinance, environmental permits are required before project works commence. Approval is given to a project proponent's EIA report when the Director of Environmental Protection considers that the report has met the requirements of the EIA study brief and the Technical Memorandum on Environmental Impact Assessment Process and that enough measures have been devised to avoid or mitigate environmental impacts.

Designated projects are projects or proposals that may have an adverse impact on the environment. They are projects covered by the Ordinance.

交通噪音評估 Traffic Noise Assessment

在眾多環境評估項目中，交通噪音評估是公眾關注項目之一。

現今有很多方法和工具來協助我們評估交通噪音。香港常用的路面交通噪音評估方法，是以英國交通部「計算路面交通噪音」文件所載的程序為基準。

這個評估方法對交通流量(如行車量及行車速度等)、路面、距離、地面效應(軟或硬地)、屏障及反射效應等，就參考噪音水平作出修正，從而對噪音作出評估。

路面交通噪音的計算單位，是交通量最高1小時當中有10%時間超逾既定噪音水平的聲級(L₁₀(1小時)dB(A))*。量度點是住宅外牆1米處。這樣量度道路交通噪音，是依據「計算路面交通噪音」而定，而其他國際環境噪音標準也普遍採用這做法。

作出評估時，一般須根據道路工程項目啓用後首15年內的設定交通情況或估計的最高交通量。

*：分貝是量度聲音的單位。它是對數標度(logarithmic scale) 而不是線性標度(linear scale) 一般來說，減少3分貝即將噪音強度減弱約50% (相等於把交通流量減少50%)

Among those key items under the EIA, traffic noise assessment is one of the issues concerned by the public.

There are many methods and tools to assess traffic noise. The commonly adopted method in Hong Kong for the assessment of road traffic noise is based on the procedures given in the UK Department of Transport document "The Calculation of Road Traffic Noise (CRTN)".

The assessment method gives corrections to adjust the reference noise level for traffic flow (such as traffic volume and speed), road surface correction, distance, ground effect (soft or hard), barrier and reflection effects etc.

The road traffic noise is presented in terms of noise levels exceeded for 10% of the one-hour period for the hour having the peak traffic flow. The symbol is L₁₀ (1hour) and the unit is dB (A)*. The assessment point is taken to be at 1m from the external facade. This approach follows the CRTN and is commonly adopted in other international environmental noise standards.

Assessments are normally based on the design traffic conditions or the maximum traffic projections within 15 years upon operation of the road works.

* : Decibel is the unit of noise level. It is measured in a logarithmic scale rather than a linear one. Generally speaking, decrease in 3dB will reduce about 50% of traffic noise (which is equivalent to reduction of 50% traffic flow).

更詳細有關環境影響評估的資料可以參閱以下環保署網頁：
More detailed information about Environmental Impact Assessment is available on the Environmental Protection Department's Website as follow:
<http://www.epd.gov.hk/eia/>

土地勘測工作 Ground Investigation Works

我們已展開工程的土地勘測工作，預計於2009年3月完成，提供地質資料以進行中九龍幹線的初步設計工作。

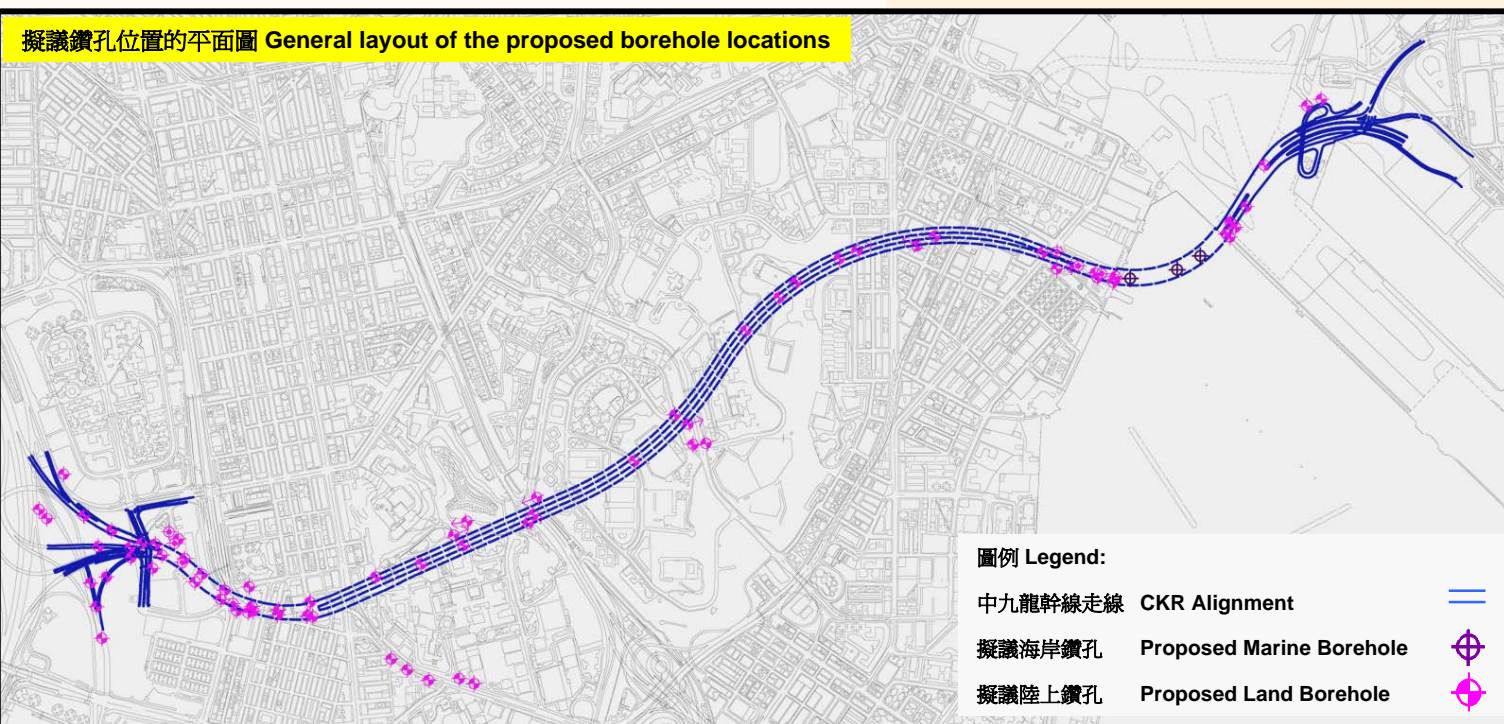
我們沿中九龍幹線走線選取了適當的位置進行土地勘測工作。有關位置詳情，可參考以下附圖。

在工程範圍不同的位置會進行不同的樣本抽取及測試。全職監察土地勘測工作將會由富經驗的工程師負責。

We commenced the ground investigation works for the project for completion in March 2009. The ground investigation information obtained will be used in the preliminary design of Central Kowloon Route.

We selected suitable locations along the Central Kowloon Route alignment for the ground investigation works. Please refer to drawing below for the locations' details.

Different types of sampling and testing would be carried out within the works area. Full-time supervision of the ground investigation fieldwork will be undertaken by an experienced engineer.





鑽探儀器 Drilling Machine



鑽孔樣本 Borehole Sample

資料研究 Desk Study

資料研究是在進行地質勘測工作之前的準備工作，是工地勘測的第一個階段。研究結果會用於計劃地質勘測的工作。研究範圍包括盡量收集工地在地质及歷史上的相關資料。

The desk study is the preparation work taken up prior to commencing the Ground Investigation works. It should always be the first stage of the Site Investigation and is used to plan the Ground Investigation. The study involves researching the site to gain as much information as possible, both geological and historical.

抽樣及測驗 Sampling and Field Testing

一個詳細的地質勘測包含不同的樣本收集及測試。例如鑽孔的其中三類分別是污染、海岸及土地鑽孔，測試則會包括標準貫入測試、十字板試驗和原地剪切試驗等等。所需要的測試、深度及樣本位置將會由工程師在工地指導。

In a detailed ground investigation, different types of sampling and testing would be included. For example, three types of boreholes are contamination, marine and land borehole while tests include standard penetration test, vane shear test and in-situ shear test etc. Required tests, levels and sample locations should be instructed by Engineer on site.



進行海上鑽探
Carrying out Marine Ground Investigation

我們重視你的意見 We Value Your Comment



「中九龍幹線通訊」是以月刊形式出版。如對本工程有任何疑問及意見，歡迎：

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我們的網站

Our website : <http://www.central-kowloon-route.com.hk>