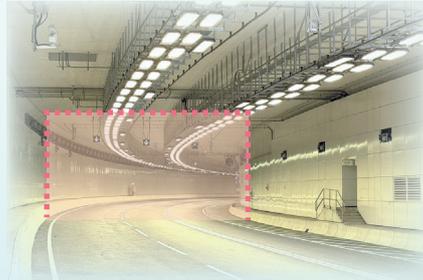


Central Kowloon Bypass (Yau Ma Tei Section) Trivia

Tunnel Features

Construction Methods

- Different construction methods result in various tunnel shapes:
- Rectangular shape (cut-and-cover method)
- Horseshoe shape (drill and blast method)



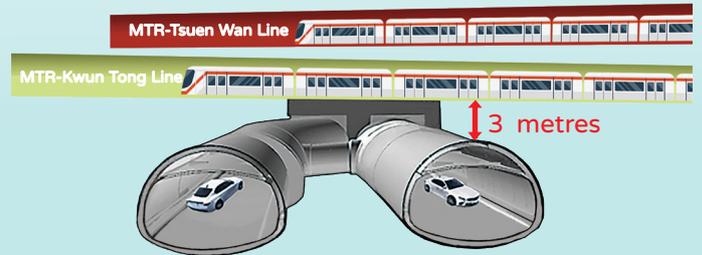
Cut-and-cover Tunnel



Drill and Blast Tunnel

Challenges

- The deepest point of the tunnel is **148** metres below ground level (located in Ho Man Tin Estate)
- The tunnel alignment intersects with **7** MTR lines, and the tunnel structure is only about **3** metres away from the Kwun Tong Line railway structure (located at Nathan Road).



Central Kowloon Bypass (Yau Ma Tei Section)

Landscaped Decks

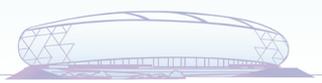
- Landscaped decks were constructed above the tunnel portals:
- The Yau Ma Tei landscaped deck covers an area of approximately **32,000** square metres, equivalent to about **4.5** football pitches, and connects to the West Kowloon Terminus bus station landscaped deck.
- The Kai Tak landscaped deck covers approximately **11,000** square metres, equivalent to about **1.5** football pitches, and connects to the Kai Tak Main Stadium, Shing Kai Road Park, and Shing Fung Road Park.



Western Portal - (Yau Ma Tei) Landscaped Deck



Eastern Portal - (Kai Tak) Landscaped Deck



Tunnel Facilities

Ventilation System

- There are **3** ventilation buildings at Yau Ma Tei, Ho Man Tin and Kai Tak
- Tunnel portals are equipped with vertical ventilation dampers
- Airflow sensors are installed at both tunnel portals
- A total of **44** jet fans (Diameter: 1.25m)



Vertical Ventilation Damper



Airflow Sensor

Lighting System

- This is the first tunnel in Hong Kong adopting a LED lighting system featuring approximately **3,300** LED light tubes
- It reduces tunnel lighting power consumption by about **33%**, saving approximately **2** million kilowatt-hours of electricity annually



Jet Fan and LED Lighting System

Fire Services System



- Fire services equipment niches and emergency exits are located every **100m**, (**42** in total)
- There are approximate **800** smoke dampers, including **102** vertical smoke dampers
- Approximately **280** fire services equipment niches are installed
- A drencher system with **24** sprinkler nozzles are installed near the Yau Ma Tei Portal



Fire Services Equipment Niche and Emergency Exit



Horizontal Smoke Damper



Drencher System



Vertical Smoke Damper

Traffic Control and Monitoring System

- 121** CCTV cameras are installed in the tunnel
- Over **1,000** traffic control devices are in place



Central Control Room cum Traffic Controller Room



Kai Tak Administration Building

Kai Tak Administration Building

- Includes a Central Control Room cum Traffic Controller Room, featuring a video wall made up of **36** number of 55-inch display screens for tunnel operators to manage daily operations.
- Equipped with **51** solar panels, features an environmental friendly office and public space.
- Utilizes green building materials for the façade to minimise environmental impact.
- Awarded the "BEAM Plus New Buildings Version 2.0" Platinum Certification
- Received the Environmental Building Award 2025 in the New Building category (Completed Projects – Public)

