

Design of Entrance/Exit B of South Horizons Station

In general, MTR underground stations buried in soil or rock are constructed using concrete structure and with waterproof layer to prevent ingress of water into stations. Nevertheless, as Entrance/Exit B is protected by the structure of the existing underground void and restricted by the space of that void, its design is rather special, and fire resistance boards are used for constructing its roof. According to the clarification by the MTRCL, the portion of the Entrance/Exit B of South Horizons Station, which is adjacent to the concourse, was located within a void surrounded by concrete structure for placing underground utilities underneath the road level of South Horizon Drive. (Indicative diagram showing the positions of Entrance/Exit B of South Horizons Station and the fresh waterpipe concerned at **Appendix**) That concrete structure (coloured in green at **Appendix**) is owned by the South Horizon. As that void (coloured in pink at **Appendix**) is completely isolated, it would not be affected by underground water or rain. Hence, the roof of Entrance/Exit B (coloured in yellow at **Appendix**) could be constructed using thinner fire resistance board.

In the incident, part of the fire resistance board of the roof was damaged by the fresh water ejected from the water pipe. The fresh water then flowed into the concourse from the damaged part.

海怡半島站B出入口與涉事食水管位置的示意圖

Indicative diagram showing the positions of Entrance/Exit B of South Horizons Station and the concerned fresh waterpipe

(以切面圖展示 Shown in Sectional View)



圖例 Legend

- B出入口的混凝土結構 Concrete Structure of Entrance/Exit B
- 海怡半島現有的混凝土結構 Existing Concrete Structure of South Horizons
- 以防火板建成的B出入口頂部 The roof of Entrance/Exit B constructed by fire resistance board
- 海怡路以下的現有空間 Existing void underneath South Horizon Drive

註

1. 不按比例
2. 為清晰示意，只展示涉事的事物

Remarks

1. Not to scale
2. For clarity, only concerned subjects are shown