

Tung Chung New Town Extension – Tai Ho Interchange (Contract No. NL/2020/07)

Temporary Traffic Arrangement for Construction of Bridges of Tai Ho Interchange and Road Sign Gantries

Purpose

The construction of Tai Ho Interchange and directional sign gantries at North Lantau Highways under the captioned project will be commenced soon. As Tai Ho Interchange would involve erection of 2 nos. of vehicular bridge decks spanning over North Lantau Highway (NLH) and construction of 3 nos. of directional sign gantries and associated street lightings (see **Figure 1**), the Civil Engineering Development Department (CEDD)'s Contractor is required to implement a series of Temporary Traffic Arrangements (TTAs) at NLH during the construction period. This paper aims to brief the members of the Traffic and Transport Committee of the Islands District Council on the proposed TTAs.

Background

2. The proposed Tai Ho Interchange will be an important junction connecting Tung Chung and the urban area in the future. It connects the proposed Road P1 (Tung Chung East to Tai Ho section) with the two existing main external roads of Tung Chung, i.e. Cheung Tung Road and NLH. The Tai Ho Interchange project involves meticulous road and bridge construction procedures, entailing demolition of an existing bridge and erection of new bridge decks, as well as construction of five slip roads. Starting from mid-2022, CEDD's Contractor has implemented TTAs at a section of NLH on both Tung Chung and Kowloon bounds in the vicinity of Pak Mong and Tai Ho Wan for the roadside works, including closure of the hard shoulder and reduction of the speed limit from 110 km/h to 80km/h. The abovementioned TTAs have been operating satisfactorily.

Upcoming works

3. In order to facilitate the construction of the bridge decks of Tai Ho Interchange and directional sign gantries, CEDD's Contractor planned to implement TTAs at NLH between 2024 Q4 to 2025 Q3 with a view to ensuring the safety of the road users and satisfactory completion of the works.

4. The advance works of the vehicular bridges and directional sign gantries spanning over NLH including foundation works for the direction sign gantries and installation of associated street lightings would be commenced in October 2024. The advance works require temporary closure of the fast lanes at the section of NLH on both Tung Chung and Kowloon bounds in the vicinity of Pak Mong and Tai Ho Wan and temporary removal of the central dividers of that road section for about 3 months. In order to minimize the road closure period, the advance works would also be carried out at night time. The installation of the vehicular bridges and directional sign gantries spanning over NLH would be commenced in 2025 Q1.

Proposed Temporary Traffic Management Schemes

5. During the construction of the vehicular bridges and directional sign gantries, the following TTAs are proposed for implementation:

- During the construction of the advance works, 24 hours closure of the fast lanes for the section of NLH on both Kowloon and Tung Chung bounds in the vicinity of Pak Mong and Tai Ho Wan would be implemented. Two traffic lanes at each of the Kowloon and Tung Chung bounds of NHL will be maintained for road users (see **Figure 2**).
- Temporary full closure of a section of NLH (both bounds) in the vicinity of MTR Siu Ho Wan Depot for erection of bridges at night time. During the road closure, road users could use the adjacent slip roads for travelling to Kowloon and Tung Chung (see **Figure 3**).

6. Summary table for implementation of TTAs

Anticipated TTA	Anticipated TTA period	Works to be carried out
Temporary closure of fast lanes of NLH on both Tung Chung and Kowloon bounds	October 2024 to 2025 early Q1 (24 hours road closure)	Foundation works for 3 nos. traffic sign gantries and advance works for construction of Tai Ho Interchange bridge decks (See Figure 2)
Temporary full closure of a section of NLH in the vicinity of MTR Siu Ho Wan Depot. Road users could divert to the adjacent slip roads for travelling to and from Kowloon	2025 Q1 (1 night) (1:00am to 5:00am)	Safety test and trial run for erection of vehicular bridge decks (See Figure 3)
Temporary full closure of a section of NLH in the vicinity of MTR Siu Ho Wan Depot. Road users could divert to the adjacent slip roads for travelling to and from Kowloon	2025 Q1 (1 night) (1:00am to 5:00am)	Erection of the Tai Ho Interchange Bridge (A1) (See Figure 3)

Anticipated TTA	Anticipated TTA period	Works to be carried out
Temporary full closure of a section of NLH in the vicinity of MTR Siu Ho Wan Depot. Road users could divert to the adjacent slip roads for travelling to and from Kowloon	2025 Q1 (1 night) (1:00am to 5:00am)	Erection of the Tai Ho Interchange Bridge (A2) (See Figure 3)
Temporary full closure of section of NLH Kowloon bound in the vicinity of MTR Siu Ho Wan Depot. Road users could divert to the adjacent slip roads for travelling to Kowloon	2025 Q2 (1 night) (1:00am to 5:00am)	Demolition of the existing northern bridge and erection of directional sign gantry (DS36) (See Figure 4)
Temporary full closure of section of NLH Tung Chung bound in the vicinity of MTR Siu Ho Wan Depot. Road users could divert to the adjacent slip roads for travelling to Tung Chung	2025 Q2 (1 night) (1:00am to 5:00am)	Demolition of the existing southern bridge and erection of directional sign gantry (DS37) (See Figure 5)
Temporary full closure of section of NLH Kowloon bound in the vicinity of MTR Siu Ho Wan Depot. Road users could divert to Airport Island and Artificial Island of Hong Kong-Zhuhai-Macao Bridge for travelling to Kowloon	2025 Q3 (1 night) (1:00am to 5:00am)	Erection of directional sign gantry (FADS35) (See Figure 6)

7. According to the Traffic Impact Assessment (TIA) carried out by the traffic consultant, the abovementioned TTAs would not cause significant traffic impact to the concerned road section.

8. During the implementation of the above TTAs, CEDD, the Consultant and the Contractor would keep close coordination with relevant government departments and parties concerned in order to minimize the traffic impact to nearby area and road users. The Contractor would also implement the following measures:

- Noticeable temporary traffic signs would be erected on the concerned road section for guiding the road users.
- Sufficient advance warning signs would be erected to alert the road users on NLH on the road traffic arrangement.
- The adjacent traffic condition would be monitored and make appropriate adjustment to the TTAs in a timely manner.

Contingency Traffic Measures

9. CEDD's Contractor and his independent traffic consultant have formulated contingency plan including mobilizing back-up mobile crane to site for assistance in case of emergency, arranging traffic controller at appropriate locations for implementing emergency traffic arrangements.

10. CEDD will also provide all necessary assistance to Hong Kong Police Force and Transport Department to implement their contingency traffic arrangements at NLH, for example, diverting to Airport Island and Artificial Island of Hong Kong-Zhuhai-Macao Bridge as alternative route (see **Figure 7**).

Advice Sought

11. Members are invited to offer comments on the above proposals for the TTAs.

Civil Engineering and Development Department
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