# **Consultation Paper** 21 May 2015

# Sai Kung District Council Traffic and Transport Committee

# Development of Anderson Road Quarry Site Road/Junction Improvement Works

# <u>Aim</u>

1. This paper aims to brief members the road/junction improvement works of the Development of Anderson Road Quarry Site Project and to solicit member's views and support for this project.

## **Background**

2. The Civil Engineering and Development Department (CEDD) has briefed the Traffic and Transport Committee, Sai Kung District Council (SKDC T&TC) on 26 September 2013 regarding the traffic impact assessment, the related road/junction improvement works and pedestrian connectivity facilities of the "Development of Anderson Road Quarry – Engineering Feasibility Study". SKDC members supported in-principle the proposed works.

3. Following the completion of Engineering Feasibility Study, CEDD commenced investigation and design study on 18 July 2014, to further assess and review the design of the proposed works. CEDD has briefed the SKDC T&TC on 19 March 2015 regarding the roadworks within quarry development site and the off-site pedestrian connectivity facilities.

4. This paper mainly focuses on briefing members the road/junction improvement works of the Development of Anderson Road Quarry Site project.

## **Traffic Impact Assessment and Road/Junction Improvement Works**

5. The Traffic Review Report of the investigation and design study updated the data which has been used in the Traffic Impact Assessment of the Engineering Feasibility Study, and fully reviewed measures suggested under the Engineering Feasibility Study according to the latest situation. According to the conclusions of the Traffic Review Report, the traffic flow generated from the Development of Anderson Road Quarry Site will not have significant adverse impact on the traffic conditions in the area provided that the following four

road/junction improvement works can be implemented<sup>1</sup>:

- (a) Modify the junction design of Sau Mau Ping Road/Lin Tak Road, construct a new flyover from Lin Tak Road to Sau Mau Ping Road, to provide a free flow carriageway from Lin Tak Road and Sau Mau Ping Road to Tseung Kwan O Road slip road (Annex 1);
- (b) Lengthen roadside lay-by at Lin Tak Road near Hong Wah Court and Hing Tin Estate of Lam Tin to address the traffic problem caused by the on-street pick-up/drop-off activities, which are currently blocking the through traffic at Lin Tak Road (Annex 1);
- (c) Improve the junction of Clear Water Bay Road/On Sau Road, including provision of a U-turn facility at Clear Water Bay Road, near Fei Ngo Shan Road (Annex 2); and
- (d) Widen the section of New Clear Water Bay Road (Kowloon-bound) near Shun Lee Tsuen Road from one lane to two lanes to solve the queuing problem at this bottleneck location (Annex 3).

#### Major Traffic Network

6. Route 6, comprising of Central Kowloon Route, Tseung Kwan O-Lam Tin Tunnel (TKO-LT Tunnel) and Trunk Road T2, is under planning (**Annex 4**). The TKO-LT Tunnel is undergoing detailed design and ground investigation. It is anticipated to be commissioned in 2020 the earliest, to cater for the traffic demand of local areas. The TKO-LT Tunnel will provide an alternative route to the existing Tseung Kwan O Tunnel so that part of the capacity of Tseung Kwan O Road in Kwun Tong will be freed up<sup>2</sup> for meeting the traffic demand to

<sup>&</sup>lt;sup>1</sup> According to the forecast of the Traffic Review Report, if the proposed four road/junction improvement works could be implemented, even if the traffic flow brought by the Development of Anderson Road Quarry Site is taken into account, the flow/capacity ratio<sup>#</sup> of the main roads and reserve capacity <sup>##</sup> of the main junctions within this area in 2026 will still be at a satisfactory level. For example, the flow/capacity ratio of south and north bounds of Sau Mau Ping Road (Hiu Kwong Street to Tseung Kwan O Road section) will be about 0.60 and 0.43 respectively, the flow/capacity ratio of south and north bounds of Lin Tak Road (Tseung Kwan O Road to Pik Wan Road section) will be about 0.38 and 0.30 respectively, the flow/capacity ratio of New Clear Water Bay Road near Shun Lee Tsuen Road is about 0.61, and the reserve capacity of junction of Clear Water Bay Road and On Sau Road will be about 15%.

<sup>[#</sup> Flow/capacity ratio is an index of road traffic condition at peak hours. The flow/capacity ratio is considered acceptable for value equal to or less than 1.0. For value between 1.0 and 1.2, it is considered that the traffic congestion is still under control. The traffic congestion condition is considered as serious if the value is greater than 1.2.

<sup>##</sup> Reserved Capacity (R.C.) represents the remaining capacity expressed in percentage of total capacity available to take up additional traffic. An R.C less than 0% indicates traffic congestion occurred. An R.C. greater than 5% indicates the most vehicles will be able to clear the junction without waiting for more than one traffic signal cycle. Greater R.C. indicates greater remaining capacity to receive more traffic. ]

 $<sup>^2</sup>$  According to the forecast of the Traffic Review Report, if Route 6 completed on schedule and without the proposed Development of Anderson Road Quarry Site, the flow/capacity ratio of Tseung Kwan O Road (Kowloon-bound) in the AM peak would be 0.88 in 2026, which would be decreased about 28% comparing to the flow/capacity ratio 1.13 in 2014. If the traffic to be generated from Development of Anderson Road Quarry Site is included, the flow/capacity ratio would be 0.98, which is still below 1.0 and is considered as at acceptable level.

be generated upon the resident occupancy of the Development of Anderson Road Quarry Site in 2022/23.

7. The detailed design of Central Kowloon Route and Trunk Road T2 are underway. The completion of these two projects will take due consideration with that of TKO-LT Tunnel.

# Public Transport

8. A public transport terminus and a public transport lay-by will be provided within quarry development site to provide necessary public transport feeder service. The traffic flow and pedestrian flow will be distributed to different drop-off points and MTR stations. To reduce the traffic loading of the Kwun Tong town centre, we proposed to provide new bus / minibus routes, including feeder services to and from nearby MTR stations (such as Yau Tong Station) and bus services to and from Kowloon. We also proposed to provide the bus-bus interchanges at the Toll Plaza of Tseung Kwan O Tunnel (Kowloon side) for residents using bus services to and from Tseung Kwan O.

## **Pedestrian Connectivity Facilities**

9. In order to reduce the demand for short vehicular trips within Kwun Tong District, we proposed to construct pedestrian connectivity facilities, which compose of footbridges together with lifts or escalators, for four pedestrian connectivity routes. Three out of four routes will connect the quarry development site and Kwun Tong MTR station en route to estates within Kwun Tong District. The fourth route will connect to the proposed bus-bus interchanges at Tseung Kwan O Tunnel Toll Plaza, via Po Tat Estate.

## **Environmental Impact Assessment**

10. We have conducted preliminary environmental impact assessment for the proposed road/junction improvement works. Road/junction improvement works include installation of noise enclosure, semi-noise enclosure and noise barrier. These facilities could reduce the noise level to an acceptable level.

#### Next Step

11. We plan to gazette the proposed road/junction improvement works under the "Roads (Works, Use and Compensation) Ordinance (Chapter 370) for consulting the public in late 2015.

12. We will continue maintaining close liaison with Sai Kung District Council and community on the implementation of the project.

### **Advice and Support**

13. Members are invited to give advice and support to the proposed works.

### Annex

- Annex 1 Improvement measures at junction of Lin Tak Road/Sau Mau Ping Road and Lin Tak Road
- Annex 2 Further improvement measures at junction of Clear Water Bay Road/On Sau Road
- Annex 3 Widening measures at Clear Water Bay Road near Shun Lee Tsuen Road
- Annex 4 Development of Anderson Road Quarry Site Road/Junction Improvement Works and Major Road Network

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