

## 1. Introduction

1.1 The purpose of this report is to present the findings of the Traffic impacts Assessment (TIA) that has been carried out for the proposed desalination plant at Tseung Kwan O (TKO) Area 137.

## 2. Traffic impacts Assessment

- 2.1 The TIA assesses the identified potential traffic impacts resulting from the proposed works for the proposed Desalination Plant and its dedicated trunk feed system for transferring of fresh water output from the desalination plant to the Tseung Kwan O Fresh Water Primary Service Reservoir (TKOFWPSR) in Tsui Lam Road. The existing and past traffic conditions have been reviewed by referring to the Annual Traffic Census (ATC) between year 2004 and year 2012 to examine the traffic patterns and the trend traffic growth. The capacity used to evaluate the traffic condition is based on the Design Flow as per Transport Planning and Design Manual (TPDM) 2011 Volume 2.
- 2.2 The proposed water main will be set out from Wan Po Road via Po Hong Road, Po Lam Road North and finally arriving at the TKOFWPSR in Tsui Lam Road.
- 2.3 Recommendations of appropriate temporary traffic arrangements are provided to mitigate the identified potential traffic impacts as far as possible.
- 2.4 The proposed water main will pass through a landfill site on Wan Po Road and three residential areas located in Hau Tak, Po Lam and Tsui Lam Estates. These four areas form the local traffic network in the area.
- 2.5 Appropriate warning signs and lighting will be provided on the approaches to and along the works area in accordance with the standards and requirements as stipulated in the 'Code of Practice for the Lighting, Signing and Guarding of Road Works' and "Transport Planning and Design Manual".
- 2.6 The proposed construction work will occupy one traffic lane in Wan Po Road, Po Hong Road, Po Yap Road, Po Lam Road North and Tsui Lam Road.
- 2.7 Traffic impacts arising from the proposed construction works in the vicinity of Study Area are assessed in accordance with the proposed TTA schemes with analysis carried to demonstrate the level of traffic utilization for AM Peak (08:00 to 09:00) and PM Peak (17:30-18:30) under existing condition during normal weekdays.

## 3. Conclusion

- 3.1 The results of this TIA reveal that the affected carriageways should be operating at satisfactory level while undertaking the proposed construction works of the water main by adopting open cutting and/or trenchless method. It will be acceptable to allow works areas between junctions among Wan Po Road, Po Yap Road, Po Hong Road, Po Lam Road North and Tsui Lam Road to be occupied without causing any adverse traffic impact.
- 3.2 Junctions of Wan Po Road/Wan O Road, Wan Po Road/Landfill Site, Wan Po Road/Shek Kok Road, and Tsui Lam Road/Po Lam Road North would experience some degree of traffic congestion while carrying out the construction. It is suggested to consider adopting either the trenchless method or decking during the peak periods in order to minimise potential traffic impact.