

- 4.4.14 In any event, the soundness of a decision to demolish existing road bridges (and especially, in the case of the Causeway Bay Flyover, where these have only recently been constructed) simply to reconstruct them 100m away, is debateable.

Demolition of Police Officers' Club

- 4.4.15 For Tunnel Variation 2, the Trunk Road alignment will pass beneath the Police Officers' Club (POC). Conflict with the POC foundations, and the cut-and-cover form of construction for this shallow tunnel, mean that the POC will need to be demolished.

Air Quality at the Tunnel Portal

- 4.4.16 Polluted air emissions from road tunnel portals is always a major concern, especially where there are nearby residential uses. The area of concern for all three tunnel variations is at the eastern tunnel portal at North Point, where there are existing residential buildings close to the shoreline. For Tunnel Variations 2 and 3, the Trunk Road tunnel portal will be located on the line of the existing IEC, in even closer proximity to the residential buildings than Tunnel Variation 1. In the case of Tunnel Variation 1, the portal is located to the north of the existing IEC highway structure, which will provide some shielding and buffer, and there is a greater separation between the tunnel portal and the residential units; there would therefore be a lesser degree of air quality impacts.
- 4.4.17 Although the acceptability or otherwise of the tunnel portal layout, from the environmental point of view, has yet to be determined, the potential adverse air quality impacts should be borne in mind when examining the appropriateness of these tunnel variation options.

4.5 Comparison of the Trunk Road Tunnel Variations

- 4.5.1 **Table 4.1** provides a comparison between the Trunk Road Tunnel Variations 1, 2 and 3, in broad terms, in respect of key indicators: area of reclamation, impacts to existing traffic, technical highway concerns and impacts to existing highway structures, impacts to existing development, planning and land use considerations, environmental concerns, time for construction and costs.
- 4.5.2 It should be noted that the areas of reclamation given in Table 4.1 are the areas of permanent reclamation, and include a notional allowance for reprovisioning requirements (for ferry pier, salt water pumping station, cooling water pumping stations, etc) associated with each of these tunnel variation options.
- 4.5.3 It should also be noted that there will be a requirement for temporary works (including temporary reclamation) to facilitate cut-and-cover tunnel construction and for temporary traffic diversions. These temporary works will be required in the PCWA basin and in the CBTS. In the CBTS, the extent of the temporary works, for all three tunnel variations, will be such that the existing moorings will need to be relocated outside the typhoon shelter during the construction period.