

9.4 Layout Options for the Relocation of Dangerous Goods Vehicle Ferry Pier

9.4.1 Background

9.4.1.1 Under the current study for the Revised Scheme of South East Kowloon Development, a vehicular ferry, used by those dangerous goods vehicles, is reprovisioned within South East Kowloon Development on a like to like basis. The existing Kwun Tong Ferry Pier, which is used for similar purpose in the past, will be terminated by early 2006 as required by reclamation work.

9.4.2 Proposed Location Adjacent to the Marine Refuse Collection Point

9.4.2.1 A proposal has been made to locate the Dangerous Goods Vehicle Ferry Pier (DGVFP) adjacent to the existing Marine Refuse Collection Point in site 6C3 (see **Drawing No. 22936/MS/301**). However, this will have several shortcomings: -

- a. The headroom available under Trunk Road T2 is insufficient, as being less than the standard 5.1m for vehicular access, at the point when the vehicles cross the Trunk Road T2.
- b. As the queuing has to avoid the waterfront of the promenade, the queue area has to be the same as the current proposal. In this way the risk, primarily due to the queue area, will be same as current proposal.
- c. The operation cannot be rationalized unless the Marine Refuse Collection Point can be relocated and additional reclamation made.
- d. There will be potential water quality impact associated should additional reclamation be made for the vehicular ferry pier. Reclamation on the eastern side of the mouth of Tsui Ping Nullah is avoided to minimize the potential water quality impact.
- e. The finger pier will present navigation difficulty to the vessel leaving the Refuse Transfer Station.

9.4.2.2 In view of the above shortcomings, this option is not recommended. As such, the ferry pier cannot be accommodated in the area just east of Tsui Ping Nullah.

9.4.3 Proposed Location Adjacent to RTS

9.4.3.1 Another location near Refuse Transfer Station, which is at the waterfront of existing Kwun Tong Bus Terminal, has also been considered (see **Drawing No. 22936/MS/302**). The area will be occupied by Refuse Transfer Station / Public Fill Barging Point.

9.4.3.2 By rationalizing requirements for vehicle queuing space and amending the layout of the refuse transfer station (RTS) and public filling barging point (PFBP) at Area 6C, the DGVFP can be accommodated at the south-western corner of the RTS. The revised layout avoids impinging upon the Tsui Ping Nullah and requires, however, vehicular access to be shared with the RTS/PFBP and parking will be provided under the Kwun Tong Bypass at some distance from the pier itself.

9.4.3.3 The revised layout thus effectively combines provision of the DGVFP with the refuse transfer station (RTS) and public filling barging point (PFBP) at Area 6C. In this way, the three uses of RTS, PFBP, and DGVFP are consolidated at one location.

9.4.3.4 The queuing area of the DGVFP will be located beyond the access road leading to the RTS, PFBP and the DGVFP. However, there may be certain operation difficulty for separating the two areas, especially the queue area and the ferry pier will be separated by a public road.

9.4.3.5 Under normal operation, one berth can serve for the normal transportation purpose. However, alternate berth may be required in case of emergency or under maintenance condition. A

contingency berth is therefore incorporated at the interface between RTS and PFBP, where a single level access ramp will be provided towards the vehicular ferry. The second berth will only be operated under emergency only, access to the movable ramp via the proposed PFBP is considered acceptable. No additional queuing area will be provided for this emergency berth, with queuing area shared with the one for the permanent berth.

9.4.3.6 However, this option will have implication on the operation of the RTS and PFBP. Besides, should this option be employed, the RTS and PFBP will be shifted westward. This will reduce the size of typhoon shelter accordingly, unless the RTS/PFBP can be reduced in size.

9.4.4 Current Provision

9.4.4.1 Taking into account the potential constraints and impacts associated with the other options, the proposed location for the DGVFP in the current Outline Master Development Plan was selected as the optimum location within SEKD in recognition of a number of requirements such as:

- Vehicle queuing space;
- Constraints relating to existing land use;
- Landside and marine access; and
- The need to maintain continuous use by the public along the waterfront promenade.

9.4.4.2 The proposed location of the DGVFP will be separated into two portions, the landing and the queuing areas. This arrangement has the advantage that the landing area will occupy the least land intake at the waterfront at the Kwun Tong Area – hence the extent of reclamation can be kept at a minimum.

9.4.4.3 Under this provision, the queuing area of the DG vehicle ferry pier is located at the existing open space on northern side of Trunk Road T2/Western Coast Road (WCR). The DG vehicles will cross at the top of the underground road section towards the seafront at the time slot when loading and unloading will be made at the DG vehicle ferry.

9.4.4.4 The proposed DGVFP is located at the waterfront of Area 6C, and is separated from the existing Laguna City and the future residential development in Cha Kwo Ling by existing roads and a strip of open space planned in Area 6C. The schematic layout plan of the ferry pier is shown in **Drawing No. 22936/MS/121**. The ferry pier consists of a DG vehicle queuing area, a ground level crossing over a portal of Trunk Road T2 and a waterfront pier.

9.5 Risk Assessment for the Proposed DGVFP

9.5.1 Introduction

Background

9.5.1.1 This section is the Quantitative Risk Assessment (QRA) study for the proposed DGVFP at Cha Kwo Ling to replace the existing pier in Kwun Tong. The location of the proposed DG ferry pier and its internal layout are shown in **Drawing No. 22936/EN/361**. This Risk Assessment examines the potential risks associated with the relocation, identifies appropriate control measures and advises on any action that may be necessary.

9.5.1.2 Previously, the Government has commissioned two studies to obtain a better understanding of risks associated with DG transport. These are:

- The Risk Assessment of the Transport of LPG and Naphtha in Hong Kong (DNV Report, 1996).