# Legislative Council Panel on Development

# PWP Item No. 717CL Tseung Kwan O further development – site formation and infrastructure works at Pak Shing Kok

## **PURPOSE**

This paper informs Members of the proposal to upgrade 717CL "Tseung Kwan O further development – site formation and infrastructure works at Pak Shing Kok" to carry out site formation and infrastructure works to serve the planned development at Pak Shing Kok, Tseung Kwan O (TKO).

#### PROJECT SCOPE AND NATURE

- 2. The project **717CL** was included in Category B in September 2005. The scope of works comprises -
  - (a) site formation for three platforms of about 22 hectares (ha) in total;
  - (b) construction of local roads (Roads L781 and L782) of a total length of about 1 400 metre (m), with junction improvement at Wan Po Road and the associated footpaths and planting areas;
  - (c) restoration of about 10 hectares (ha) of the previous borrow area in Area 108;
  - (d) slope stabilisation works;
  - (e) construction of associated drains, sewers and water mains;
  - (f) construction of a fresh water service reservoir of a storage capacity of 1 600 cubic metre (m<sup>3</sup>),

- a fresh water pumping station and an approximately 550 m long access road (Road L783) to the service reservoir;
- (g) landscaping works; and
- (h) implementation of environmental mitigation measures and an Environmental Monitoring and Audit (EM&A) programme for the works mentioned in (a) to (g) above.
- 3. We plan to commence the construction works in January 2009 for completion in October 2012.
- 4. The site plan of the proposed works is at Enclosure.

#### **JUSTIFICATION**

- 5. We completed the "Feasibility Study on Further Development of Tseung Kwan O" (TKO Study) in December 2005. The TKO Study recommended developing Pak Shing Kok into a low to medium density residential area for a population of about 5 000 together with school development. The Tseung Kwan O Outline Zoning Plan, incorporating the land use proposals for Pak Shing Kok recommended in the TKO Study, was agreed by the Rural and New Town Planning Committee of the Town Planning Board on 7 March 2008.
- 6. The TKO Study has recommended site formation works for three platforms and the provision of infrastructure at Pak Shing Kok, including a fresh water service reservoir and a fresh water pumping station because of topographic reason, to serve the planned residential and school development. Our target is to complete the site formation and infrastructure works by 2012 so as to make available Pak Shing Kok for the planned development at the earliest.
- 7. Pak Shing Kok, including Area 108 in the northern part of it, was previously a borrow area providing filling materials for the reclamation of Tseung Kwan O. While site formation works for Area 108 are not required because this area is not where the planned residential and school development will be located, we need to restore this area to improve the landscape and visual quality besides preventing erosion. If the restoration works are not carried out concurrently with the works in paragraph 6 above, there would be substantial nuisance to residents and students to be

accommodated to the south of the borrow area when the restoration works are carried out in the future.

#### **PUBLIC CONSULTATION**

- 8. We consulted the Sai Kung District Council on the proposed works under **717CL** on 30 March 2007 and on 27 July 2007. Members had no objection to the proposed works.
- 9. We gazetted the proposed road scheme of **717CL** under the Roads (Works, Use and Compensation) Ordinance (RO) and the proposed sewerage scheme of **717CL** under RO as applied by the Water Pollution Control (Sewerage) Regulation on 9 November 2007. No objection was received. The Secretary for Transport and Housing authorised the road scheme on 15 February 2008 and the Director of Environmental Protection authorised the sewerage scheme on 22 February 2008.

### **ENVIRONMENTAL IMPLICATIONS**

Environmental Impact Assessment and proposed mitigation measures

- 10. The proposed works under 717CL do not constitute a designated project under Schedule 2 of the Environmental Impact Assessment (EIA) Ordinance. In the context of the TKO Study, in September 2005 we completed an EIA report under Schedule 3 of the EIA Ordinance on the planned development under the TKO Study. The EIA report concluded that the planned development, including the works for supporting the development now proposed under 717CL, would be environmentally acceptable with the implementation of mitigation measures recommended in the EIA report during construction and operation phases. These measures include the frequent watering of the site, the provision of wheel-washing facilities to reduce emission of fugitive dust, the use of movable noise barriers with particular plant during construction, a EM&A programme as well as other procedures as recommended by the Environmental Protection Department. The Director of Environmental Protection approved the EIA report on 8 December 2005.
- 11. In 2007, we conducted a Preliminary Environmental Review (PER) to review and ascertain the findings and recommendations in the approved Schedule 3 EIA report for TKO Study in relation to works under **717CL**. The PER reconfirmed that, with the appropriate mitigation measures in place during the construction and operational stages as

recommended in the EIA Report, there would not be any significant environmental impacts.

12. We will incorporate into the works contract mitigation measures recommended in the EIA report to control potential pollution arising from construction works to within established standards and guidelines. We have included \$2.7 million in the project estimate for implementing these measures.

# Treatment of contaminated soil

13. We have conducted a contamination assessment in parts of the site formation area with signs of land contamination. We estimate that about 760 m<sup>3</sup> of contaminated soil will require treatment by an appropriate remediation method prior to backfill on site. We have included \$2.0 million in the project estimate for implementing remediation works to the contaminated land.

#### Construction waste

- 14. We have considered the alignment and the design level of the proposed works under **717CL** in the planning and design stages to reduce the generation of construction waste where possible. We will reuse about 710 000 tonnes of inert construction waste from the existing surcharge mounds in the TKO Town Centre South reclamation area for the proposed site formation and restoration works. In addition, we will require the contractor to reuse inert construction waste (e.g. excavated soil) on site or in other suitable sites as far as possible. We will encourage the contractor to maximise the use of recycled or recyclable inert construction waste, as well as the use of non-timber formwork to further minimise the generation of construction waste.
- 15. We will also require the contractor to submit for approval a plan setting out the waste management measures, which will include appropriate means to avoid, reduce, reuse and recycle inert construction waste. We will ensure that the day-to-day operations on site comply with the approved plan. We will require the contractor to separate the inert and non-inert construction waste on site for disposal at appropriate facilities. We will control the disposal of inert and non-inert construction waste to public fill reception facilities and landfills respectively through a trip-ticket system.
- 16. We estimate that the project will generate about 134 000 tonnes of construction waste in total. Of these, we will reuse about 120 000

tonnes (89.6%) of inert construction waste on site, and will dispose of 14 000 tonnes (10.4%) of non-inert construction waste at landfills. The total cost for accommodating non-inert construction waste at landfill sites is estimated to be \$1,750,000 for this project (based on a unit cost of \$125/tonne<sup>1</sup> at landfills)

Tree removal, transplanting and planting

17. Of the 1 209 trees within the **717CL** project boundary, 1 112 trees will be preserved. The proposed works will involve the removal of 97 trees including 68 trees to be felled and 29 trees to be transplanted within the project boundary. All the trees to be removed or transplanted are not important trees<sup>2</sup>. We will incorporate planting proposals for an estimate of 308 trees, 9 800 shrubs and 1 200 m<sup>2</sup> of grassed area along the future roads as part of the project. We will use hydroseeding to protect formed slopes and open areas as appropriate. As part of the restoration works for the previous borrow area in Area 108, we will plant 1 300 trees, 11 500 whip trees, 85 200 shrubs and 48 400 m<sup>2</sup> of grass area.

## HERITAGE IMPLICATIONS

18. The project will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites/buildings, sites of archaeological interest and Government historic sites identified by the Antiquities and Monuments Office.

# LAND ACQUISITION

19. The project does not require any land acquisition. However, a number of Short Term Tenancies will need to be terminated with demolition of structures and site clearance works involved.

"Important trees" refers to trees in the Register of Old and Valuable Trees, or any other trees that meet one or more of the following criteria -

- (a) trees of 100 years old or above;
- (b) trees of cultural, historical or memorable significance, e.g. Fung Shui trees, trees as landmark of monastery or heritage monument, and trees in memory of an important person or event;
- (c) trees of precious or rare species;
- (d) trees of outstanding form (taking account of the overall tree sizes, shape and any special features) e.g. trees with curtain like aerial roots, trees growing in unusual habitat; or
- (e) trees with a trunk diameter equal to or exceeding 1.0 m (measured at 1.3 m above ground level), or with a height/canopy spread equal to or exceeding 25 m.

This estimate has taken into account the cost for developing, operating and restoring the landfills after they are filled and the aftercare required. It does not include the land opportunity cost for existing landfill sites (which is estimated at \$90/m³), nor the cost to provide new landfills (which is likely to be more expensive) when the existing ones are fully utilised.

# **WAY FORWARD**

20. We plan to seek the Public Works Sub-committee's endorsement for upgrading the works under **717CL** to Category A (at an estimated cost of about \$250.0 million in money-of-the-day prices) on 4 June 2008.

# **ATTACHMENT**

Enclosure – Plan No. TK2349

Development Bureau Civil Engineering and Development Department April 2008

