## ACE-EIA Paper 8/2016 For advice on 18 November 2016

# **Environmental Impact Assessment Ordinance (Cap. 499) Environmental Impact Assessment Report**

Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, N.T.

#### **PURPOSE**

This paper presents the key findings and recommendations of the Environmental Impact Assessment (EIA) report for the "Proposed Low-rise and Low-density Residential Development at Various Lots and their Adjoining Government Land in D.D. 104, East of Kam Pok Road, Mai Po, Yuen Long, N.T." ("the Project") submitted under Section 6(2) of the Environmental Impact Assessment Ordinance (EIAO) (Application No. EIA-242/2016). Glory Queen Limited ("the Applicant") and their consultants will present the EIA report at the meeting of EIA Subcommittee.

#### **ADVICE SOUGHT**

2. Members' views are sought on the findings and recommendations of the EIA report. The Environmental Protection Department (EPD) would take into account comments from the public and the Advisory Council on the Environment (ACE) in deciding whether or not to approve the EIA report under Section 8(3) of the EIAO.

### **BACKGROUND**

- 3. The Project location is shown in <u>Figure 1</u>. It is situated right next to Kam Pok Road and outside the Wetland Buffer Area as defined by the Town Planning Board (TPB). The land is zoned "Residential (Group D)" on the Approved Mai Po and Fairview Park.
- 4. The Project is a proposed residential development that falls within Deep Bay Buffer Zone 2 and is a Designated Project under Item P.1 of Schedule 2 (Part I) of the EIAO, i.e. "A residential or recreational development, other than New Territories exempted houses within Deep Bay Buffer Zone 1 or 2." For the purpose of complying with the requirements under the EIAO, the Applicant submitted an EIA report to EPD under Section 6(2) of the EIAO for approval. EPD, in conjunction with all relevant authorities, considers that the EIA report meets the requirements of the EIA Study Brief and the Technical Memorandum on EIA Process (TM), for the purpose of exhibiting the report for public inspection, under Section 7(4) of the EIAO.

#### DESCRIPTION OF THE PROJECT

- 5. The Project is to provide a residential development comprising 32 two-storey houses at DD 104 Yuen Long, N.T. with ancillary facilities including a club house, a landscape pond, an interim sewage treatment plant and landscaping planting around the site.
- 6. The total site area is about 3.8 hectares. It is an isolated pocket of land surrounded by existing and planned residential developments, including Fairview Park and a planned residential development at a "REC" site to the west; Helene Terrace and Villa Camellia to the south; a "V" zone and an existing open storage site to the east; and a planned residential site "R(D)" to the north. The Project site comprises 3.17ha (83.4%) of urbanized/disturbed area, 0.3ha (7.9%) plantation, and an abandoned pond of 0.33ha (8.7%). Figure 2 shows the conceptual layout of the Project.

#### **ENVIRONMENTAL BENEFITS**

- 7. The EIA report states that the key environmental benefits of the Project include:
  - (i) Removal of an existing open air private car park and open storage site thus reduces heavy vehicle and container traffic affecting adjoining residential areas;
  - (ii) Improvement in overall landscape and visual quality of the site through landscape planting and the planned residential development; and
  - (iii) Maintaining a 5 to 8m buffer distance of landscape planting strip along Kam Pok Road to reduce potential impact from the Project on Ngau Tam Mei Drainage Channel (NTMDC).

#### CONSIDERATION OF ALTERNATIVES

8. The EIA report has considered various options for development, including alternative layouts, construction methods and sequence of work in order to avoid and minimize potential environmental impacts. The recommended layout option would provide a 5 to 8m buffer landscape strip and non-building area around the whole site to improve the visual quality of the site and to reduce impact on the NTMDC. The key approaches adopted in the Project by the applicant to avoid and minimize environmental impacts are summarized below:

## **Avoidance of Impacts**

- (i) Avoid water quality impact during construction by installing peripheral drainage channel on site to divert surface runoff to sand/silt traps and sedimentation basins before discharged into existing storm drains.
- (ii) Avoid increase in pollutant load to Deep Bay catchment by adopting a sewage treatment plant as interim measure to treat household effluent. In the long term, all effluent will be conveyed to public sewer and treated at the Yuen Long Sewage Treatment Plant.

## **Minimization of Impacts**

- (i) Minimize construction noise impacts by using quieter equipment, scheduling of works to reduce impacts with concurrent projects, and using movable temporary noise barriers.
- (ii) Use of the noise tolerant sewage treatment plant (STP) building structure and noise barrier at eastern site boundary to screen noise from open storage and industrial operation.
- (iii) Minimize construction waste generation by reusing them on-site as far as practicable.

### SPECIFIC ENVIRONMENTAL ASPECTS TO HIGHLIGHT

## **Ecological Impacts**

- 9. The Project is located in a pocket of mainly urbanized/disturbed area with existing and planned residential developments and open storage. Impacts arising from the Project on ecological important wetlands and fishponds in Deep Bay are not anticipated. Within the Project site, there is a 0.33 ha pond which has long been abandoned and isolated from continuous wetland and fishpond in Deep Bay and is subject to disturbance from existing vehicle park and open storage operation. The ecological survey conducted under the EIA found that utilization of this pond by waterbirds was very low. On the other hand, the NTMDC, which is outside the development, was frequented by waterbirds.
- 10. There would be potential impact of the Project on waterbirds at NTMDC during construction of the Project and the EIA report has recommended mitigation measures to minimize impacts, including:
  - (i) Use of quieter equipment/plants and non-percussive piling to minimize disturbance to waterbirds at NTMDC; and
  - (ii) erection of hoardings outside wintering season of waterbirds (October to March) to reduce disturbance.
- 11. With the proposed mitigation measures in place, the EIA report predicts that

the ecological impact from the proposed residential development is expected to be minimal.

## **Noise Impacts**

12. The Project has a number of existing and planned residential developments and a school (Bethel High School, 150 metres away) in the vicinity. Construction noise impacts would be mitigated through use of quieter equipment/plants and non-percussive piling, scheduling of construction programme to avoid concurrent works, use of temporary noise barriers, and close liaison with the school during school examination. With the above mitigation measures in place, the EIA report does not anticipate the Project would give rise to adverse noise impact.

### Water Quality and Sewerage Impacts

13. Eventually all effluent discharged from the Project will be conveyed to public sewer and treated at the Yuen Long Sewage Treatment Plant. In the interim, the EIA report recommends the installation of an on-site sewage treatment plant using membrane filtration, biological treatment and reverse osmosis technologies; as a result, the EIA report predicts that there will be no net increase in pollution load to the Deep Bay.

#### **Landscape and Visual Impacts**

- 14. The EIA report predicts that the Project will bring about positive landscape and visual impacts by removing the open vehicle park and open storage from the site.
- 15. 364 trees were found at the Project site, of which 274 (i.e. 75%) will be retained in-situ or transplanted, and 90 trees (i.e. 25%) comprising mainly *Leucaena leucocephala* (銀合歡), a weedy species of low value, will be felled and replaced with native broadleaved trees at a ratio of not less than 1:1.

## **Other Environmental Impacts**

16. Other environmental issues including air quality, cultural heritage, fisheries, land contamination and waste management have been addressed in the EIA. With the implementation of recommended mitigation measures, the EIA report predicts that the Project will comply with the relevant requirements under the TM.

### ENVIRONMENTAL MONITORING AND AUDIT

17. The EIA report includes an Environmental Monitoring and Audit (EM&A) Manual which recommends an EM&A programme during the construction and operation phases of the Project. Key EM&A requirements covers air quality, noise, water quality, ecology, and waste management during construction phase; and regular monitoring of treated effluent and water quality at NTMDC during operation phase.

#### **PUBLIC CONSULTATION**

18. The Applicant made the EIA report, EM&A Manual and Executive Summary available for public inspection under the EIAO from 26 August 2016 to 24 September 2016. During the public inspection period, a total of two (2) public comments were received by EPD. The environmental concerns raised by the public are largely related to ecological issues. The public comments received will be summarized in a gist to be provided to Members separately.

November 2016 Environmental Assessment Division Environmental Protection Department

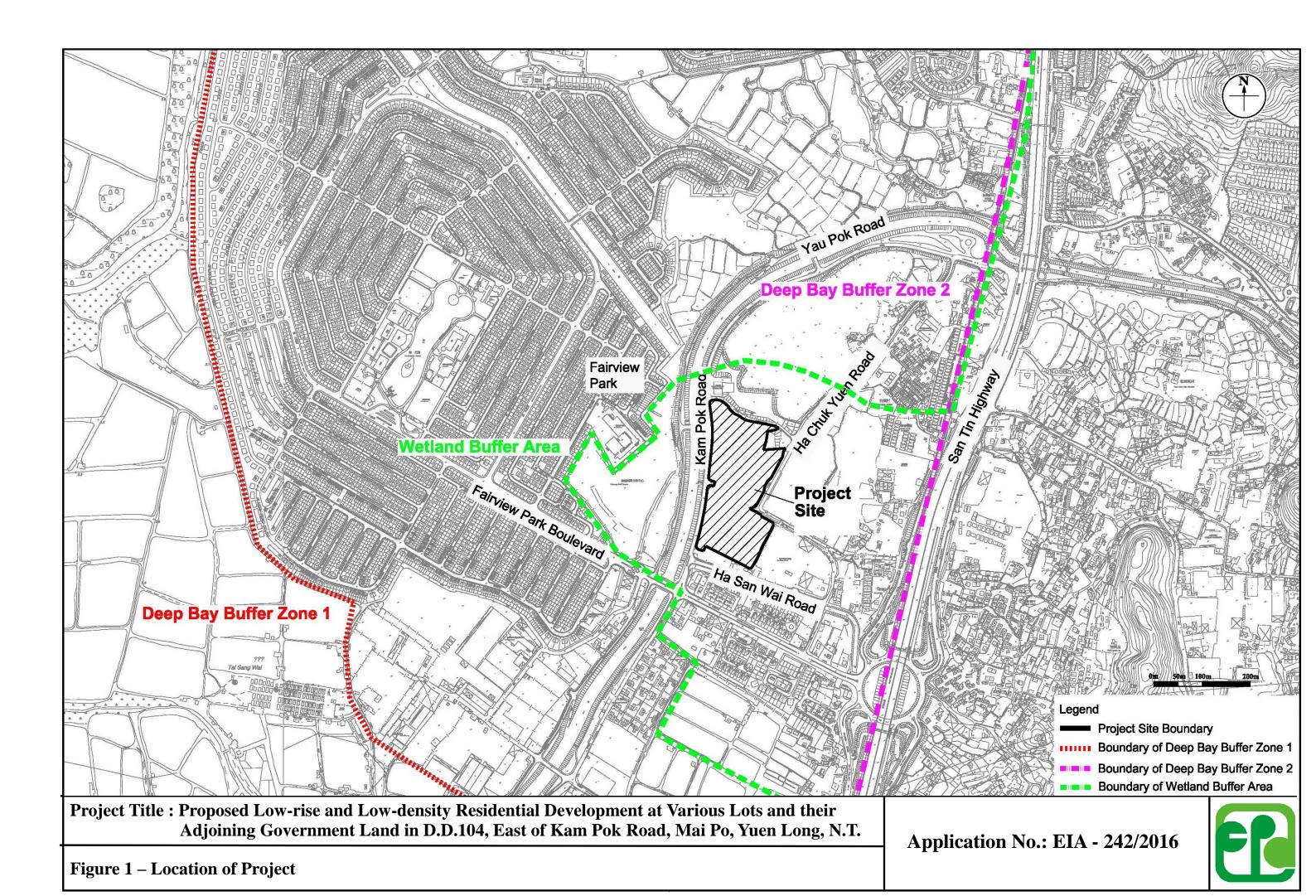




Figure 2 – Conceptual Layout of Project with Landscape Proposals

Application No.: EIA - 242/2016



Adjoining Government Land in D.D.104, East of Kam Pok Road, Mai Po, Yuen Long, N.T.