

**For discussion on  
23 November 2020**

**LEGISLATIVE COUNCIL  
PANEL ON ENVIRONMENTAL AFFAIRS**

**8002QE – Restored Landfill Revitalisation Funding Scheme  
E-Co Village at Lot B of Tseung Kwan O Stage I Landfill**

**PURPOSE**

This paper proposes to upgrade the project 8002QE – “Restored Landfill Revitalisation Funding Scheme – E-Co Village at Lot B of Tseung Kwan O Stage I Landfill” to Category A for providing funding to the Tung Wah Group of Hospitals (TWGHs) to develop a camp site-cum-green education ground (the E-Co Village) at Lot B of Tseung Kwan O Stage I Landfill (TKOIL).

**PROJECT SCOPE**

2. The project 8002QE proposed to be upgraded to Category A occupies an area of around 2 hectares with the scope of works comprises-

- (a) camping zones, children education zone, green theatre, training zones, picnic and central activity areas;
- (b) plant maze, butterfly garden, herbal garden and farming garden;
- (c) two green stations with toilets and shower facilities; and
- (d) ancillary works including utilities, access and building services etc.

———— The site plan and artistic impression of the E-Co Village are given at **Annexes 1 and 2**, respectively.

**JUSTIFICATIONS**

3. The TKOIL is located between Tseung Kwan O MTR Station and Lohas Park MTR Station, adjacent to Tseung Kwan O Waterfront Park and Tseung Kwan O South Waterfront Promenade. Given the broad views and close proximity to residential areas, the site is an ideal location for developing

recreational facilities. Part of the TKOIL has been developed into a pet garden and a football training center. To further utilise the land available in the landfill, the TWGHs proposed to develop the E-Co Village in the TKOIL.

4. Through the E-Co Village project, the TWGHs aims to revitalise TKOIL into a place for promoting environmental protection and enhancing the inclusion of families, communities as well as the environment. The E-Co Village will be operated on a non-profit-making and self-financing basis, and serves families, students, various organisations, disadvantaged groups and the general public. The E-Co Village is equipped with various green and energy conservation features, such as photovoltaic panels, solar bollard lights, solar hot water system, grey water reuse system, and small-scale yard waste composting facility etc. The E-Co Village will also incorporate a range of themed gardens for planting and strengthening the natural environment, such as butterfly garden, herbal garden, plant maze and farming garden etc. Through joining diverse activities, guided tours and workshops that promote green education in the E-Co Village, participants will experience green living and the public is encouraged to actively participate in environmental protection activities.

5. In addition, the E-Co Village contains a number of camping zones as well as outdoor activity and training zones. By taking part in outdoor activities in the green environment of Tseung Kwan O city center, the public would be able to enjoy living in the nature, and enrich the harmony experience with people and the nature. This is also an opportunity to learn about cherishing the nature and protecting the environment, as well as putting healthy and green life to practice. Besides, the TWGHs will install barrier-free facilities in the E-Co Village for the convenience of everyone.

6. Upon completion of the proposed works, the TWGHs will revitalise the site into a camp site-cum-green education ground and provide diversified recreational facilities for camping, green education, outdoor recreation, adventure training, farming and morning exercise etc. to the community.

7. The TWGHs has engaged architectural and quantity surveying consultants for carrying out the pre-construction activities of the project. The scope includes topographic survey, soil sampling, and trial pits to determine the thickness of the landfill cover and the level of groundwater etc. Besides, the consultants have conducted detailed design for buildings, building services,

landscape and relevant facilities, and submitted the works to relevant authorities for approval and registered for BEAM Plus assessment. The consultants are currently preparing tender drawings and documents etc. We intend to seek approval from the Public Works Subcommittee (PWSC) and the Finance Committee (FC) in 2020-21 to upgrade the project to Category A. Subject to approval of the FC, the proposed works could commence in the fourth quarter of 2021 for completion in the first quarter of 2023.

## **FINANCIAL IMPLICATIONS**

8. The ceiling of the grant for the proposed capital works (including pre-construction activities and the works mentioned in paragraph 2) is \$100 million (in money-of-the-day (MOD) prices) in total. In addition, we will provide funding support for the starting costs and operating deficits for the first two years of operation of this project, with a ceiling of \$5 million (in MOD prices).

## **PUBLIC CONSULTATION**

9. The Environmental Protection Department (EPD) and the TWGHs consulted the Housing and Environmental Hygiene Committee of the Sai Kung District Council on the E-Co Village project on 14 September 2017. Members in general supported this project.

## **ENVIRONMENTAL IMPLICATIONS**

10. The project is not a designated project under the Environmental Impact Assessment Ordinance (Cap. 499). The project will not cause long-term adverse environmental impact. The TWGHs have included in the project estimates the cost to implement suitable mitigation measures to control short-term environmental impacts.

11. During construction stage, contractors should implement mitigation measures as required by the TWGHs in the concerned contract to control noise, dust and site run-off nuisances to within established standards and guidelines. These measures include the use of silencers, mufflers, acoustic lining or temporary noise barriers for noisy construction activities, frequent cleaning and watering of the construction site, and the provision of wheel-washing facilities.

Meanwhile, the TWGHs will adopt a variety of practicable measures to reduce the generation of construction waste, including using reusable hoardings and non-timber formwork so that these materials can be recycled or reused in other projects, as well as recycling inert construction waste to further reduce the generation of construction waste.

## **HERITAGE IMPLICATIONS**

12. The proposed works will not affect any heritage site, i.e. all declared monuments, proposed monuments, graded historic sites or buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office.

## **LAND ACQUISITION**

13. The proposed works do not require land acquisition.

## **BACKGROUND**

### *Management and Beneficial Afteruses of Restored Landfills*

14. The waste disposed of at landfills decomposes with time and produces landfill gas and leachate in the process. In order to minimise the environmental impacts of closed landfills and eventually render them safe for various beneficial afteruses, the EPD has carried out restoration works for all the 13 closed landfills in Hong Kong since 1996. The restoration works include provision of landfill gas and leachate management systems, low permeability engineered capping layers and surface water drainage systems to reduce the impacts of landfill gas and leachate, as well as undertaking slope improvement works etc. The restoration works for various landfills were sequentially completed from 1997 to 2006. The EPD forthwith commenced aftercare work at the restored landfills, such as operating the leachate and landfill gas management systems, conducting environmental monitoring and so on to ensure that the landfills are safe and environmentally acceptable, and subsequently planned and implemented various beneficial afteruses.

15. Unlike normal land, it is necessary to resolve various technical constraints when developing beneficial afteruses at restored landfills, such as the restrictions on the loading capacity of landfills and the need for land formation. Over the years, the EPD has been striving to develop restored landfills into various recreational and conservation facilities. Some of the restored landfills have already been developed into recreational and sports facilities which are widely welcomed by the public, including the restored Jordan Valley, Ngau Chi Wan, Sai Tso Wan, Gin Drinkers Bay, Ma Tso Lung and Shuen Wan landfills. Some of these facilities were developed and managed by the Government, such as the Sai Tso Wan Playground, Ngau Chi Wan Park and Jordan Valley Park, whilst other facilities on restored landfills were developed and run by non-government organisations on the self-funded and self-financing basis, including the temporary golf driving range at Shuen Wan, the Football Training Center at Tseung Kwan O, the stargazing campsite at Ma Tso Lung, the International BMX Park at Gin Drinkers Bay and the temporary shooting range at Pillar Point Valley etc.

16. As for conservation, about 2.3 hectares of the Siu Lang Shui Landfill at Tuen Mun has been designated as a “Site of Special Scientific Interest” (SSSI), the largest known butterfly over-wintering site in Hong Kong to conserve over-wintering of danaid butterflies. In addition, the vegetation in the Ngau Tam Mei Landfill at Yuen Long has grown into a dense village woodland. We will strive to maintain and continue to use the prevailing SSSI and woodland environment of these two restored landfills for conservation purposes.

#### *Restored Landfill Revitalisation Funding Scheme*

17. In 2014, the Government set up the “Restored Landfill Revitalisation Funding Scheme” (the Scheme) to provide funding support to non-profit-making organisations<sup>1</sup> and National Sports Associations to develop recreational facilities and other innovative proposals at restored landfills. At the same time, the Government established a Steering Committee (SC) to advise on the operational arrangements for the Scheme, and to assist in assessing the applications and monitoring the approved projects.

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<sup>1</sup> Non-profit-making organisations are organisations which have obtained charitable status under Section 88 of the Inland Revenue Ordinance (Cap. 112).

18. Under the Scheme, the ceiling of grant for the capital works and related expenses<sup>2</sup> of each approved project is \$100 million (in MOD prices), and the grant to meet the starting costs and operating deficits is up to \$5 million (in MOD prices). At the meetings of this Panel on 23 June and 23 July 2014, we briefed Members on the Scheme and its operational arrangements.

19. In November 2015, the EPD invited eligible organisations to apply for Batch 1 of the Scheme. After a rigorous selection process, including seeking views from the SC on the Scheme, the District Council, as well as relevant bureaux and departments, an in-principle approval was granted to the TWGHs in February 2018 for implementation of its proposed project, namely the E-Co Village at Lot B of the TKOIL.

20. During the implementation of Batch 1 of the Scheme, we noted that many applicants might encounter various technical constraints, difficulties and challenges when developing large-scale recreational facilities at restored landfills, such as restrictions on the loading capacity of landfills, the need for land formation and infrastructure, provision of proper vehicular access, effective feeder transport, ecological and planning requirements for the surrounding environs etc. Noting that these issues will affect the development of projects and their future operational sustainability to various degrees, the SC on the Scheme has suggested that the Government should actively consider providing suitable guidelines and infrastructure for developing restored landfills, and adopt a more proactive approach to expedite their development.

21. Currently some restored landfills lack of infrastructure and proper vehicular access, thereby affecting the project development and operational sustainability in the future. In order to expedite the development of restored landfills, the EPD is studying the provision of necessary infrastructure for the restored landfills, having regard to the surrounding environment and site constraints, so that they can be put to suitable beneficial afteruses more effectively in future. For better use of resources, we will explore interim uses of undeveloped land on these restored landfills in the meantime. In addition, if organisations or groups have any suitable proposals to develop self-funded

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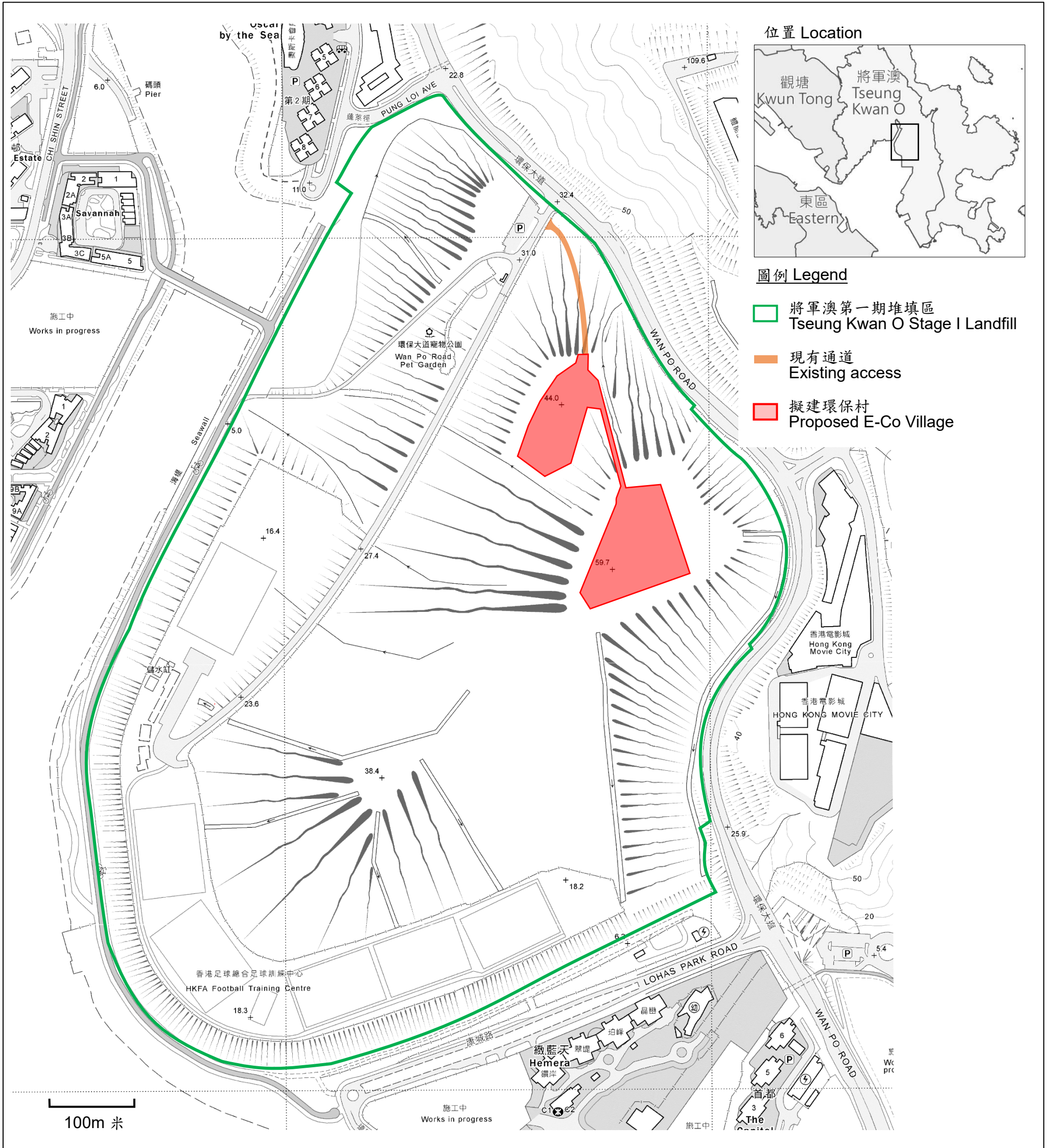
<sup>2</sup> Including pre-construction study or works, such as consultancy fee for detailed planning and architectural, landscape and engineering design, and site investigation.

recreational or sports facilities on restored landfills, and operate the facilities on a non-profit-making and self-financing basis with the support/consent of relevant policy bureaux and departments, we will actively consider and provide assistance as usual so that the restored landfills can be gainfully used and contribute to the community as soon as possible.

### **ADVICE SOUGHT**

22. Members are invited to support EPD to propose to the PWSC and FC to upgrade the project to Category A.

**Environment Bureau**  
**November 2020**



位置 Location



圖例 Legend

- █ 將軍澳第一期堆填區  
Tseung Kwan O Stage I Landfill
- █ 現有通道  
Existing access
- █ 擬建環保村  
Proposed E-Co Village

位置圖 Site Plan

位於將軍澳第一期堆填區擬建的環保村

Proposed E-Co Village at Tseung Kwan O Stage I Landfill



附件2

## Annex 2

環保村模擬圖

Artistic Impression of the  
E-Co Village





## 附件2 環保村模擬圖 - 下層平台

### Annex 2 Artistic Impression of the E-Co Village – Lower Platform





附件2 環保村模擬圖 - 上層平台  
Annex 2 Artistic Impression of the E-Co Village – Upper Platform



兒童教育基地 Children Education Zone



中央活動區 Central Activity Area



露營區 Camping Zone