

**For discussion
on 20 January 2020**

**Legislative Council
Panel on Development**

**782CL - Engineering Study on Road P1 (Tai Ho – Sunny Bay Section) and
Work Progress of the Sustainable Lantau Office**

PURPOSE

This paper briefs Members on the following items:

- (a) the proposal to upgrade **782CL** – Engineering Study on Road P1 (Tai Ho – Sunny Bay Section) to Category A at an estimated cost of \$130.2 million in money-of-the-day prices, for carrying out an engineering study on Road P1 between Tai Ho and Sunny Bay; and
 - (b) the progress of work made by the Sustainable Lantau Office of the Civil Engineering and Development Department.
2. Details of the proposal for (a) and the progress report for (b) above are at **Enclosures 1** and **2** respectively.

WAY FORWARD

3. For the proposed engineering study under **782CL**, we plan to seek funding approval from the Finance Committee after consulting the Public Works Subcommittee.

**Development Bureau
Civil Engineering and Development Department**

January 2020

782CL – Engineering Study on Road P1 (Tai Ho – Sunny Bay Section)

PROJECT SCOPE

We propose to upgrade **782CL** to Category A, the scope of which comprises –

- (a) an investigation study¹ and the preliminary design for the works relating to the Road P1 (Tai Ho – Sunny Bay Section) that mainly consists of the following works components –
 - (i) a carriageway of approximately 9.5 km long that extends from the Tai Ho Interchange² to Sunny Bay and connects to the North Lantau Highway (NLH) and the proposed Route 11, which involves viaduct(s), tunnel(s) and reclamation works; and
 - (ii) the associated building, civil, structural, marine, electrical and mechanical, landscaping³, and environmental protection and mitigation works; and
- (b) the associated site investigation works and works supervision.

2. A plan showing the indicative alignment of the Road P1 (Tai Ho – Sunny Bay Section) is at **Figure 1** of **Enclosure 1**.

3. Subject to funding approval of the Finance Committee of the Legislative Council, we plan to commence the Engineering Study on Road P1 (Tai Ho – Sunny Bay Section) (the Study) in the latter half of 2020 for completion in 30 months.

¹ The investigation study includes a review of the findings of previous studies, and impact assessments on environment, traffic, geotechnical, marine, heritage and other related aspects.

² Tai Ho Interchange is part of the Road P1 (Tung Chung – Tai Ho Section), which has been included in **779CL** entitled “Tung Chung New Town Extension - Detailed Design and Site Investigation” for implementation.

³ The investigation study covers the consideration of building cycle tracks and promenades along appropriate road section(s).

JUSTIFICATION

4. The NLH is a major route connecting Lantau, including Tung Chung and the Hong Kong International Airport, with the urban areas. At present, whenever there is a traffic incident on the NLH, the road traffic connecting Lantau and urban areas would be seriously affected. With the progressive implementation of the planned developments in North Lantau (e.g. Tung Chung New Town Extension and the SKYCITY development project at the airport), it is forecasted that the traffic congestion of the NLH would get serious during peak hours since 2031. In order to relieve the traffic pressure on the NLH, cope with the housing and economic developments at North Lantau, and enhance the resilience of the North Lantau transport network, we have to commence the Engineering Study on Road P1 (Tai Ho – Sunny Bay Section) as soon as possible.

5. Road P1 is about 12 km long in total, with two sections which are about 2.5 km of Tung Chung to Tai Ho Section and about 9.5 km of Tai Ho to Sunny Bay Section. Road P1 (Tung Chung – Tai Ho Section) is within the scope of **799CL** entitled “Tung Chung New Town Extension - Detailed Design and Site Investigation”, and the relevant detailed design and site investigation are in progress.

6. The Study is to determine the alignment, overall layout, preliminary design proposal and land requirement. Under the Study, we will conduct relevant impact assessments, including an environmental impact assessment (EIA), with a view to identifying the impacts and the mitigation measures required. We will also carry out site investigation works to provide geotechnical and geological information for relevant design works.

FINANCIAL IMPLICATIONS

7. We estimate the costs of the Study and the associated site investigation works to be \$130.2 million in money-of-the-day prices.

PUBLIC CONSULTATION

8. Members of the Islands District Council (DC) and Tsuen Wan DC were consulted on the Study at the meetings of 25 February 2019 and 5 March 2019 respectively. We did not receive objection to the Study in DC meetings.

ENVIRONMENTAL IMPLICATIONS

9. The proposed Road P1 (Tai Ho – Sunny Bay Section) is a designated project under Schedule 2 of the EIA Ordinance (Chapter 499). The Administration is required to apply for an environmental permit for the construction and operation of the project. We will conduct an EIA study to comply with the requirements of the EIA Ordinance. The EIA study will assess the environmental impacts arising from the proposed works and it will cover the aspects of air quality, water quality, ecology, fisheries, cultural heritage, noise, landscape and visual impact, etc.

10. The Study and the associated site investigation works will only generate minimal construction waste. We will require the consultants to consider measures comprehensively to minimise the generation of construction waste and to reuse/recycle construction waste as far as possible in the future implementation of the project.

HERITAGE IMPLICATIONS

11. The Study and the associated site investigation works will not affect any heritage sites, i.e. all declared monuments, proposed monuments, graded historic sites and buildings, sites of archaeological interest and government historic sites identified by the Antiquities and Monuments Office. The Study will investigate if the proposed Road P1 (Tai Ho – Sunny Bay Section) project will affect any sites of archaeological values.

LAND ACQUISITION

12. The Study and the associated site investigation works will not require any land acquisition. The Study will examine the need and extent of land acquisition and/or clearance required for the proposed Road P1 (Tai Ho – Sunny Bay Section).

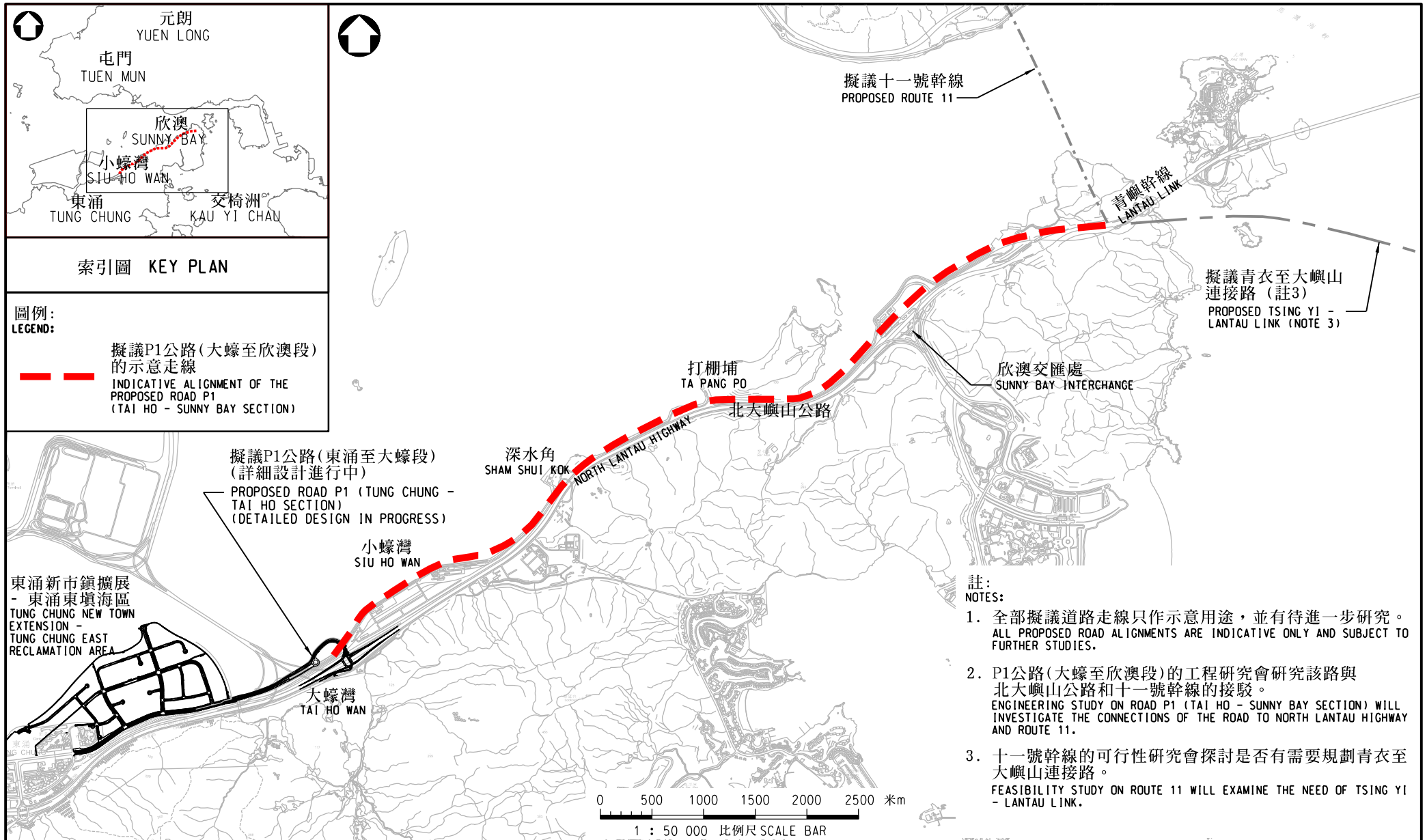
BACKGROUND INFORMATION

13. The concept of Road P1 has already been mentioned in the Northshore Lantau Development Feasibility Study completed in 2001, which suggested Road P1 to connect the airport with Sunny Bay. Road P1 was proposed as a dual two-lane carriageway parallel to the NLH.

14. The Revised Concept Plan for Lantau drawn up by the Lantau Development Task Force in 2007 affirmed the need of Road P1 to accommodate the long-term traffic demand.
15. We upgraded **782CL** to Category B in September 2014.
16. The Sustainable Lantau Blueprint promulgated by the Administration in June 2017 reaffirmed the need of Road P1 to strengthen the connectivity of the major developments along the northshore of Lantau.
17. The Civil Engineering and Development Department (CEDD) completed the “Technical Study on Developments at Siu Ho Wan and the Associated Transport Infrastructures” in 2018. The traffic and transport impact assessment indicated that Road P1 would be required to alleviate the traffic congestion in North Lantau in the long term. CEDD is carrying out the “Study on Traffic, Transport and Capacity to Receive Visitors for Lantau – Feasibility Study”, which has also established the traffic needs and the preliminary technical feasibility of Road P1 (Tai Ho – Sunny Bay Section).
18. The Study and the associated site investigation works will not directly involve any tree removal or planting proposals. We will require the consultants to take into consideration the need for tree preservation in carrying out the Study.

**Development Bureau
Civil Engineering and Development Department**

January 2020



圖則名稱 drawing title

**P1公路(大蠔至欣澳段)的工程研究
 - 示意走線位置圖**

ENGINEERING STUDY ON ROAD P1 (TAI HO - SUNNY BAY SECTION)
 - LOCATION PLAN OF INDICATIVE ALIGNMENT

項目編號 item no.
782CL

比例 scale
1 : 50 000

圖則編號 drawing no.
SLO-Z0469

辦事處 office
可持續大嶼辦事處
SUSTAINABLE LANTAU OFFICE

CEDD 土木工程拓展署
CIVIL ENGINEERING AND DEVELOPMENT DEPARTMENT

Work Progress of Sustainable Lantau Office

The Sustainable Lantau Office (SLO) of the Civil Engineering and Development Department (CEDD) was set up on 1 December 2017 to take forward the planning, assessment, design and implementation of various development projects and initiatives in conservation, local improvement as well as leisure and recreation in Lantau in a well prioritised, coordinated and integrated manner.

2. As committed at the meeting of the Finance Committee (FC) held on 18 November 2017, the SLO will report the progress of their work to the relevant Panel(s) of the Legislative Council (LegCo) regularly. This paper sets out the SLO's work progress since the last report to the Panel on Development of the LegCo on 26 March 2019.

PROGRESS OF MAJOR TASKS

Development Projects

3. The SLO has been pressing ahead with the following development projects in Lantau:

Tung Chung New Town Extension (TCNTE)

- (a) The TCNTE comprises Tung Chung East (TCE) and Tung Chung West (TCW) extension areas¹. The 130-hectare reclamation works with eco-shoreline in TCE extension area commenced in late 2017, with a view to handing over the first land parcel in the first half of 2020 for public housing development and having the first population intake in 2024. The authorisation notices of the associated roads and sewerage works in TCE extension area under Roads (Works, Use and Compensation) Ordinance (Chapter 370) and Water Pollution Control (Sewerage) Regulation (Chapter 358, Subsidiary Legislation AL) respectively were gazetted in September 2018. The detailed design of the infrastructure is in progress. We are undertaking an urban design study

¹ According to the Recommended Outline Development Plans, upon the full development in 2030, TCNTE could provide a total of about 49 600 housing units, and a commercial hub with gross floor area of about 870 000 m² for office, retail and hotel uses, creating some 40 000 job opportunities.

for TCNTE to explore measures to develop it as a pilot of smart, green and resilient community.

- (b) To protect the Tung Chung Stream more effectively, we are working on the detailed design of the sustainable urban drainage system to control the amount and water quality of surface runoff discharged into the stream. Besides, to further enhance the environmental capacity to contribute to a sustainable Lantau, we propose developing Tung Chung Stream into a River Park. Its detailed design is underway in collaboration with the relevant stakeholders.
- (c) The road and sewerage works in Ma Wan Chung were gazetted in the third quarter of 2017 and the amendment scheme on the road works was gazetted in the second quarter of 2018. The coastal pedestrian access and the sewerage works in Yu Tung Road in TCW extension area were gazetted in the second quarter of 2018, and the works of the latter were authorised under the Water Pollution Control (Sewerage) Regulation (Chapter 358, Subsidiary Legislation AL) in August 2018. The road and sewerage works in Tung Chung Road North were gazetted in the second quarter of 2018 and the amendment schemes were gazetted in the second quarter of 2019. The road and sewerage works in Tung Chung Valley in TCW extension area were also gazetted in the fourth quarter of 2019.

Infrastructure Works for Public Housing Development at Area 54, Tung Chung

- (d) We are taking forward the infrastructure works to support the public housing development² in Tung Chung Area 54. Phase 1 works comprising the construction of footpath, cycle track, cycle parking area, bus lay-by, etc., were substantially completed in July 2019. Phase 2 works, including the construction of carriageway and sewerage facilities, are scheduled for completion in end 2020 to tie in with the completion of the public housing development in 2021-2022.

² The proposed public housing development will provide about 3 300 housing units for a population of about 10 000.

Studies related to Artificial Islands in the Central Waters

- (e) As regards the funding application for the Studies, the Panel on Development was consulted on 26 March 2019³, and the support of the Public Works Subcommittee was obtained on 25 May 2019. We are submitting the funding application to the FC for scrutiny in accordance with the established procedure.

Engineering Study on Road P1 (Tai Ho - Sunny Bay Section)

- (f) To relieve the traffic pressure on the North Lantau Highway, cope with the housing and economic developments at North Lantau, and enhance the resilience of the North Lantau transport network, we have to commence the Engineering Study on Road P1 (Tai Ho – Sunny Bay Section) as soon as possible. Details are at **Enclosure 1**.

Topside Development at Hong Kong Boundary Crossing Facilities (HKBCF) Island of Hong Kong-Zhuhai-Macao Bridge (HZMB)

- (g) Jointly with the Planning Department, we have commissioned a study on the feasibility of the topside development at HKBCF island of HZMB. In response to the invitation of the Government in October 2018, the Airport Authority Hong Kong has commissioned a study on developing airport-related businesses on the topside of HKBCF island, which is anticipated to be completed in end 2020. We will keep in view the situation and revisit the topside development plan when appropriate.

Local Improvement Works

4. To enhance the living environment and quality of life for locals, we have been carrying out the following studies and local improvement works:

Improvement Works at Mui Wo

- (a) We have completed the extension of an existing carpark, construction of a new carriageway, realignment of an existing access road and landscaping works. We are now working on the facelifting proposal around Mui Wo Ferry

³ Two special meetings on 13 and 27 April 2019 were held to receive public views on the Studies.

Pier, including the construction of an entrance plaza and a waterfront promenade as well as the reprovisioning of the cooked food market, cycle parking area and public transport interchange. We plan to carry out a public engagement exercise on the facelifting proposal in 2020.

Improvement Works at Tai O

- (b) The construction of the public open space, public transport terminus, public car park, loading/unloading area and cycle parking area was substantially completed in October 2019. The design of Phase 2 Stage 2 works, comprising footbridge construction, enhancement of existing space for holding community and cultural events, and upgrading of the Yeung Hau Temple garden, is in progress.

Improvement Works at Ma Wan Chung

- (c) We are taking forward the works including the construction of coastal pedestrian access, car parking facilities, beautification works, drainage and sewerage works. The beautification works have been scheduled for completion by March 2020. Detailed design of the remaining works is in progress.

Local Roads and Pier Facilities Improvement Works in South Lantau

- (d) We are undertaking the “Study on Traffic, Transport and Capacity to Receive Visitors for Lantau” to examine the internal traffic and transport (including possible road and pier improvement works), possible green transport as well as the capacity to receive visitors for Lantau. The study is anticipated to be completed in 2020.

Conservation Initiatives

5. The SLO endeavours to take forward various initiatives to enhance conservation while promoting leisure and recreation proposals that are sustainable and compatible with the local context of Lantau.

Conservation of Ecologically Important Habitats

- (a) We are conducting the Ecological Study for Pui O, Shui Hau, Tai O and Neighbouring Areas to review the existing ecological information in Lantau, explore appropriate

conservation measures for the three priority sites of Pui O, Shui Hau and Tai O as well as assess and prioritise the needs of conducting detailed ecological surveys in other designated areas of Lantau. The study also collates ecological data to build up a database capturing the current conditions of Lantau. The study is scheduled for completion in the first quarter of 2020.

Funding Support for Conservation Projects

- (b) We are preparing to set up the \$1 billion Lantau Conservation Fund (LCF) to take forward conservation of rural Lantau and to improve the rural environment. We plan to include the proposed new commitment concerning the part of the LCF related to conservation projects (i.e. \$500 million) in the 2020-21 draft Estimates for LegCo's approval in the context of the Appropriate Bill 2020. The Administration has also earmarked \$500 million for minor local improvement works in support of conservation initiatives and improvement on rural environment in Lantau. The relevant projects will be submitted to the LegCo in the related Block Allocations under the Capital Works Reserve Fund.

- (c) The theme of "Nature Conservation in South Lantau" specially introduced in 2017-18 under the Environmental Education and Community Action Projects funding scheme of the Environment and Conservation Fund has been extended to 2018-19 to support non-profit making organisations to take forward community engagement and education activities on nature conservation in South Lantau. Apart from the nine projects with a total grant of around \$9 million approved in 2017-18, there were two projects with a total grant of around \$2.7 million approved in 2018-19.

Cultural and Historical Studies

- (d) We are engaging consultants, by phases, to carry out detailed studies on the rural culture and history of the villages in Lantau and set up a cultural and historical database. The first-phase cultural and historical studies focusing on rural villages at Northwest Lantau has commenced in November 2019.

- (e) We have engaged consultants to collect views of key

stakeholders and the public for developing a revitalisation strategy plan for Tung O Ancient Trail and the surrounding villages.

Strengthening Controls on Landfilling and Dumping of Construction and Demolition (C&D) Waste

- (f) We have been adopting administrative measures to tackle landfilling and dumping of C&D waste at source in collaboration with relevant policy bureaux and departments:
- i. Prohibiting all dump trucks engaged for TCNTE's works contracts from using Tung Chung Road for delivery of C&D waste, and requiring them to be equipped with global positioning system or equivalent for effective monitoring of their movements;
 - ii. Requested through briefing and correspondence the relevant stakeholders to enhance their monitoring and control over disposal of C&D waste;
 - iii. Promulgated a circular memorandum to restrict contractors of newly tendered public works contracts from occupying or renting private land of ecological value;
 - iv. Established a database on cases of environmental vandalism on Lantau and seeking regular updates and inputs from relevant government departments, to help monitor the situation;
 - v. Conducting a Proof-of-Concept study, through technological application, track vehicles entering closed roads in Lantau without a valid Lantau Closed Road Permit;
 - vi. Reinstating affected government land as soon as practicable. For example, the woodland restoration works at Ma Po Ping have been completed and horticultural maintenance is being carried out; and
 - vii. Collaborating with relevant departments in stepping up the effort to tackle environmental vandalism cases and review the legislation concerned as well as strengthening the relevant statutory enforcement.

Sustainable Leisure and Recreation Facilities

6. The SLO has contributed to developing the Northeast Lantau into a node for leisure, entertainment and tourism as well as promoting sustainable leisure and recreation activities in Lantau for public enjoyment, including:

Sunny Bay Reclamation

- (a) We plan to seek funding from the LegCo for taking forward the Planning and Engineering Study on Sunny Bay Reclamation⁴.

Improvement and Expansion Works for Mountain Bike Trail Networks

- (b) The expansion of mountain bike trail networks and the provision of a practice ground in Mui Wo were substantially completed in December 2019 whereas the remaining trail network in Chi Ma Wan is expected to be substantially completed in the first quarter of 2020. We plan to engage consultants in early 2020 to carry out the detailed design of the Expansion of Mountain Bike Trail Networks (Remaining Phase) and other minor improvement works in South Lantau.

Improvement Works for Leisure and Recreation Facilities

- (c) We are formulating the Lantau Trails and Recreation Plan for developing a hiking trail network connecting various heritage, ecological and recreational hotspots, enabling diversified sustainable leisure experiences and promoting healthy living. We are also preparing programmes for the different proposed projects and initiatives and to study and implement them in phases. We are also planning the improvement works for the hiking facilities in Ngong Ping, including improvement to a section of Nei Lak Shan Country Trail and Lantau Trail as well as the provision of new viewing platforms.
- (d) For the quick-win improvement works, we have substantially

⁴ Detailed planning of land uses and various assessments to establish the technical feasibility of the supporting infrastructure are included.

completed the toilet improvement works at Nam Shan Campsite and installed sustainable waterless toilets at Lo Kei Wan and Tsin Yue Wan. We plan to build another sustainable waterless toilet at Shap Long in the first half of 2020. Besides, we are carrying out the campsite improvement works at Shek Pik and Nam Shan Campsites for completion in first half of 2020.

- (e) The trial scheme to increase weekend ferry schedules to/from Tai O has been extended by one year to September 2020.

Public Engagement

7. We actively engage relevant academics, professionals, experts in our studies and projects. We have arranged three expert groups to provide views on topics related to the Ecological Study for Pui O, Shui Hau, Tai O and Neighbouring Areas, receiving capacity for visitors and green transport for Lantau, and the Lantau Trails and Recreation Plan. We will also set up an expert group to advise on cultural conservation. We have been collaborating with relevant government departments and non-governmental organisations through different activities to increase public awareness and promote community participation regarding Lantau conservation. Through various events such as School Promotion Programme, Eco Expo Asia and Hong Kong Biodiversity Festival 2019, we organised a number of different activities (including talks, exhibitions and guided tours) in 2019 to enhance public awareness of conservation and promote sustainable development of Lantau. In respect of the development of the artificial islands in the Central Waters, we will continue our efforts to explain the project objectives and directions of the technical studies to the public and engage various professionals and young people in the planning and design of the artificial islands.

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January 2020