

**For information on
11 June 2022**

LanDAC Paper No. 02/2022

LANTAU DEVELOPMENT ADVISORY COMMITTEE

Work Progress of the Sustainable Lantau Office

PURPOSE

This paper aims to brief the Lantau Development Advisory Committee (LanDAC) on the work progress of the Sustainable Lantau Office (SLO).

BACKGROUND

2. 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.

PROGRESS OF MAJOR TASKS

(1) Development Projects

3. SLO has been pressing ahead with development projects in Lantau, including the Infrastructure Works for Tung Chung New Town Extension (TCNTE), the Engineering Study on Road P1 (Tai Ho - Sunny Bay Section), and the Studies related to Artificial Islands in the Central Waters.

Project	Latest Work Progress
TCNTE (comprising Tung Chung East (TCE) and Tung Chung West (TCW) extension areas)	(a) The 130 hectare (ha) reclamation works under TCNTE project are in progress as scheduled. As of March 2022, four public housing sites of about 10 ha in total have been handed over to the Hong Kong Housing Authority while

(Translated Version)

Project	Latest Work Progress
	<p>two sites of about 8.8 ha in total for commercial and residential use have been handed over to the Lands Department.</p> <p>(b) The construction works of the first batch of main infrastructure under TCNTE commenced successively since May 2021, and the detailed design for the site formation and infrastructure works of the next phase is in progress.</p>
Engineering Study on Road P1 (Tai Ho - Sunny Bay Section)	<p>(a) The Study commenced in June 2021 for completion within 30 months.</p>
Studies related to Artificial Islands in the Central Waters	<p>(a) The Study commenced in June 2021 for completion within 42 months. The Study mainly comprises a detailed planning and engineering study for the artificial islands of about 1 000 ha around Kau Yi Chau (KYC), and a technical feasibility study on the priority road and rail links connecting the artificial islands.</p> <p>(b) With respect to the reclamation extent, we are carrying out the technical assessment with due regard to various factors such as hydrodynamic regime, ecological and environmental impacts, water depth, anchorage areas, major fairways, etc. We have also commenced other related engineering and infrastructures studies, including the appraisal of fill materials supply, examination of land formation levels, planning of a climate resilient stormwater drainage system, and provision of various facilities relating to sewage treatment, water supply, power supply and waste management, etc.</p> <p>(c) With respect to the transport infrastructures, we are carrying out the technical feasibility study of the priority road and rail links connecting the KYC artificial islands with Hong Kong Island West, Northeast Lantau and the coastal areas of Tuen Mun. We are working on proposals with innovative concepts, including smart mobility, integrated</p>

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Project	Latest Work Progress
	<p>transport hub, major roads to be placed underground, integrated basement for underground facilities, car-free/car-lite and pedestrian priority zones and cyclist-friendly cycle track network design.</p> <p>(d) With respect to the environmental impact assessment (EIA), we are taking forward the assessments according to the three EIA study briefs, i.e. the reclamation for KYC artificial islands, the Hong Kong Island – Northeast Lantau Link and the KYC artificial islands development. Besides, we are carrying out the associated baseline surveys (covering ecologies and fisheries).</p> <p>(e) With respect to financial assessment and arrangement, we are examining different financial arrangements including the evaluation of various financing options (such as build-operate-transfer, rail plus property development model, selling of development rights, pre-sale of land parcels and issuance of bonds) as well as establishing a special purpose vehicle.</p> <p>(f) We anticipate that the preliminary proposals on items (b), (c), (d) and (e) above will be developed by end of 2022 for public consultation.</p>
Study on Traffic, Transport and Capacity to Receive Visitors for Lantau	(a) The Study has been completed. The key study findings, recommendations and relevant follow-up are set out in the LanDAC Paper No. 01/2022.

(2) Smart, Green and Resilient Initiatives

4. We will continue to actively adopt city concepts that are smart, green and resilient to environment and climate in the TCNTE areas for their first trial.

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Initiative	Latest Work Progress
TCNTE	<p>(a) We are constructing eco-shorelines, including mangrove, rocky and vertical eco-shorelines, in a bid to provide a more suitable habitat for colonisation of marine species and enhancing the biodiversity.</p> <p>(b) To protect the ecological environment of Tung Chung Stream more effectively, we are constructing 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 resilient capacity of Lantau to contribute to sustainable development of Lantau, we are working on the detailed design of the second phase of River Park located at Tung Chung Stream.</p> <p>(c) We are constructing common utility tunnels, and are enhancing walkability and mobility through provision of comprehensive road, footpath and cycle track networks, connected blue green infrastructures and user-friendly environment.</p> <p>(d) We will work with the relevant departments to install electric vehicle chargers, water intelligent network, automatic meter reading system and district cooling system.</p>
Technological Application to identify vehicles without valid Lantau Closed Road Permit	<p>(a) In March 2020 we commenced a Proof-of-Concept study on the application of technology for identifying vehicles without valid closed road permits entering the Lantau closed roads. It is anticipated that on-site installation of the devices will be completed in 2023 followed by a one-year field trial before handing over to the Hong Kong Police Force for management and maintenance.</p>

(3) Conservation Initiatives

5. SLO endeavours to take forward various initiatives to enhance

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conservation while promoting leisure and recreation proposals that are sustainable and compatible with the local context of Lantau. We are actively promoting various conservation and recreation initiatives in accordance with the Lantau Conservation and Recreation Masterplan¹. We are also promoting the conservation of Lantau through the first round approved projects funded by the Lantau Conservation Fund (LCF).

Initiative	Latest Work Progress
Conservation of Ecologically Important Habitats	<p>(a) The Ecological Study for Pui O, Shui Hau, Tai O and Neighbouring Areas has been completed. We are currently implementing some of the short-and-medium term conservation measures recommended in the Study, such as encouraging non-profit-making organisations to carry out conservation and related projects in the priority sites through LCF. With regard to the Study's preliminary recommendation to consider exploring the introduction of direct intervention and active management for comprehensive habitat conservation and management work in the priority sites, we commenced the "Initiatives for South Lantau Eco-recreation Corridor – Investigation Study" in November 2021 which includes evaluating the recommendations from various perspectives such as nature conservation, land management and implementation with a view to formulating and designing a feasible conservation plan. The Investigation Study is expected to be completed by end of 2023.</p> <p>(b) Apart from the Study for the three priority sites mentioned above, the ecological study for the second batch areas (i.e. San Tau to Sham Wat, Yi O and Shap Long) has commenced in September 2021.</p>

¹ The Lantau Conservation and Recreation Masterplan has been formulated based on the overarching principle of "Development in the North; Conservation for the South" adopted in the Sustainable Lantau Blueprint. The Masterplan represents a point-line-plane approach, linked up by connectors in the form of trails, bike networks, and road/water transport to form five themed clusters, namely (i) North Lantau Recreation Corridor, (ii) Northwest Lantau Eco-Cultural Corridor, (iii) South Lantau Eco-Recreation Corridor, (iv) Rural Township Improvement and (v) Hiking Hub.
<https://www.lantau.gov.hk/en/whats-new/Lantau-Conservation-and-Recreation-Masterplan.html>

(Translated Version)

Initiative	Latest Work Progress
LCF ²	<p>(a) The Government set up the LCF Advisory Committee in October 2020 and invited the first round of applications for conservation and related projects from late 2020 to end of March 2021. The response for the first round of applications was overwhelming and a total of 18 applications, including 2 Conservation Management Agreement (MA) projects, 10 Research (RE) projects and 6 Education & Engagement (EE) projects were approved, which involved a total grant of over \$50 million. All the approved projects have commenced successively since November 2021 and details of the projects are in Appendix A. The second round of applications was opened in late December 2021. It is expected that the results will be announced in the third quarter of 2022 or earlier.</p> <p>(b) In addition, a total of 8 minor local improvement works projects, involving about \$68 million, were funded under the first and second batches in December 2020 and June 2021 and the works have commenced since 2021 progressively. Please refer to Appendix B for the details of the projects. We will continue to liaise with various government departments to identify suitable minor local improvement works projects to be taken forward under the LCF³.</p>
Tackling Landfilling and Dumping of Construction and	(a) We will continue to collaborate closely with the relevant policy bureaux and departments to tackle landfilling and dumping of C&D waste,

² For the \$1 billion LCF, the first part (\$500 million) will be dedicated to providing financial support to eligible non-governmental organisations, charities, post-secondary education institutions, etc., to collaborate with local communities and landowners and carry out three streams of projects, including conservation management agreement, research, as well as education and engagement. The second part (\$500 million) is dedicated to supporting minor local improvement works to be carried out by the Government for Lantau conservation.

³ For this part of LCF, the funding cap for each minor local improvement works project refers to the latest authorized limit of Category D project item under capital works reserve fund announced by Financial Services and the Treasury Bureau (FSTB).

(Translated Version)

Initiative	Latest Work Progress
Demolition (C&D) Waste	<p>including taking different administrative measures.</p> <p>(b) We will continue to make written request to the relevant stakeholders, including works departments, contractors, authorised persons and utility undertakers, to enhance their monitoring and control over disposal of C&D waste.</p> <p>(c) The LCF would be conducive to the conservation work involving private land.</p>
Cultural and Historical Studies	<p>(a) We will carry out studies in phases on the culture and history of the villages in Lantau to explore suitable conservation and revitalisation proposals and to set up a cultural and historical database. The first two phases focusing on villages in northwest and southeast Lantau commenced in 2019 and 2020 respectively. The first phase on villages along the coastal area from Tung Chung to Tai O ⁴ was completed in March 2021. The remaining parts of the studies in northwest and southeast Lantau are expected to be completed in the third quarter of 2022 and the first quarter of 2023 respectively.</p> <p>(b) We are implementing the relevant work in phases according to the recommendations of the revitalization strategy plan for villages along the coastal area from Tung Chung to Tai O, including the launch of signage pilot scheme on the theme of culture and history of northwest Lantau.</p>

⁴ According to the Cultural and Historical Studies for northwest Lantau undertaken by SLO, the walking trail connecting Tung Chung and Tai O (Tung O Trail) is commonly known as “Tung O Ancient Trail”. The name first appeared in the book named 大嶼山探勝遊 published in 2003 and has been widely used since 2007 after publication of a report with subject as “Tung O Ancient Trail” in a newspaper. However, the “Tung O Ancient Trail” is not an ancient trail listed by Antiques and Monument's Office in “Site of Archaeological Interest in Hong Kong”.

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(4) Leisure and Recreation Initiatives

6. SLO has all along been committed 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.

Initiative	Latest Work Progress
Lantau Trails and Recreation Plan	<p>(a) We completed the study on improvement of hiking trails in Lantau in October 2021. In addition to the proposed Round-the-Lantau Route (RLR) linking up the hotspots in Lantau, the study also recommended to use recycled materials to construct and improve the RLR's sustainability and proposed the conceptual design for hiking hubs along the RLR. We are implementing the RLR in phases and have commenced the first phase of works in November 2021 in Tai O for completion in the third quarter of 2022. The remaining phase of the works is expected to commence in late 2022 to connect the entire loop of RLR. We are also preparing for the detailed design and construction of the hiking hubs.</p> <p>(b) We commenced the preliminary design in mid-2021 for the feasible sustainable and low-impact eco-recreation and education initiatives in South Lantau covering areas along the catchwater road and near Shek Pik Reservoir.</p> <p>(c) We also commenced the remaining phase of improvement works for hiking facilities in Ngong Ping in mid-2021. The works included improvement of a section of 400 metre Nei Lak Shan Country Trail, construction of three viewing platforms and improvement of the existing Ngong Ping campsite.</p> <p>(d) We commenced the works, in early 2022, for re-provisioning of a shelter along Lantau Trail Section 3 previously damaged by typhoon. We will keep liaising with the Agriculture, Fisheries and Conservation Department on the</p>

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Initiative	Latest Work Progress
	<p>planning, design and provision of different supporting facilities within the country parks in Lantau, including provision of sanitary facilities at Pak Kung Au as well as hiking supporting facilities such as viewing platform, wind shelter, camping facilities and hiking hubs.</p> <p>(e) The existing ferry operator has in 2021 increased the weekend ferry schedules to/from Tai O. We are collaborating with relevant departments to explore improvement measures for way finding/signage to the Tung Chung Development Pier to further promote the use of water transport.</p>
Improvement and Expansion Works for Mountain Bike Trail (MBT) Networks	<p>(a) The expansion of MBT networks and provision of a practice ground in Mui Wo as well as the remaining MBT network in Chi Ma Wan have been substantially completed.</p> <p>(b) The detailed design of the expansion of the MBT networks (Remaining Phase) connecting Mui Wo and Pui O is expected to be completed in July 2022 and the relevant works anticipated to commence in the fourth quarter of 2022.</p>
Beautification of Old Tung Chung Road	<p>(a) We are collaborating with the relevant departments and have commenced a study in December 2021 to explore the feasibility of thematic planting in a section of Old Tung Chung Road between Pak Kung Au and Cheung Sha. The planting proposal, which mostly features native species, will enhance the scenery for public enjoyment as well as the biodiversity.</p>
Sunny Bay Reclamation	<p>(a) We are reviewing the programme for taking forward the Planning and Engineering Study on Sunny Bay Reclamation⁵ and making preparations for the funding application for the Study.</p>

⁵ Detailed planning of land uses and various assessments to establish the technical feasibility of the supporting infrastructure are included.

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(5) Local Improvement Works

7. To enhance the living environment and quality of life for the locals, we will continue to carry out the following studies and local improvement works.

Improvement Works	Latest Work Progress
Improvement Works at Mui Wo	(a) The gazettal of Phase 2 Stage 2 works, which comprises the entrance plaza, waterfront promenade, reprovisioning of the cooked food market, bicycle parking area and public transport interchange, was completed on 22 March 2022. We are currently handling the objections received.
Improvement Works at Tai O	(a) We have completed the detailed design of Phase 2 Stage 2 works, which comprises footbridges, amphitheatre cum open space, a public car park and upgrading works of an open area in front of Yeung Hau Temple. We have consulted the relevant stakeholders including the Tai O Rural Committee and Islands District Council, and held the resident forum on 18 June 2021. The gazettal of the Phase 2 Stage 2 works was completed on 16 November 2021 and no objection was received. We plan to seek funding approval from the Legislative Council (LegCo) in mid-2022 with an aim to commence the works as soon as possible. Moreover, the preliminary design of the Phase 3 works, comprising construction of a promenade and improvement works to local trails and supporting facilities, is in progress.
Improvement Works at Ma Wan Chung	(a) After completion of the beautification works of footbridge and Tung Chung Public Pier, we also commenced the construction of coastal pedestrian access, widening of Tung Chung Road North and construction of car parking facilities, etc. in May 2021 under the TCNTE project.

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(6) Public Engagement, Education and Promotion Activities

8. We take forward the public engagement, education and promotion activities in our studies and projects to enhance public awareness of conservation and promote sustainable development of Lantau.

Activity	Latest Work Progress
Public Engagement	<p>(a) We will continue to engage relevant academics, professionals and experts in our studies and projects. We have arranged five expert groups/panels to provide views and strategic directions on topics related to nature conservation, visitors receiving capacity and green transport for Lantau, trails and recreation initiatives, cultural conservation and public relations strategy for Lantau development and conservation.</p> <p>(b) Throughout the whole process of the studies relating to Artificial Islands in the Central Waters, we will continue to maintain communication with different sectors and relevant stakeholders. Since the commencement of the studies in June 2021, we have engaged various stakeholders to exchange views on relevant issues (including environmental and ecological aspects, planning and urban design, port operation, etc.). In addition, we have held a joint professional forum in collaboration with six professional institutes as well as a study workshop with their young members to enable an interactive discussion, knowledge and experience sharing, and view exchange. Besides, different expert advisory panels, comprising academics, professionals and experts from various sectors, have been set up to provide expert advices on issues relating to planning and urban design principles, infrastructure works, transport planning, sustainability and carbon neutrality, urban forestry and biodiversity as well as smart, green and resilient initiatives, etc.</p>

(Translated Version)

Activity	Latest Work Progress
	<p>(c) We organised six sessions of “Tung Chung East Reclamation Projects – Guided Tour of Smart Construction Site” from July to November 2021 to promote the TCNTE project as well as the innovative technologies used in reclamation and construction works to enhance public understanding of smart low-carbon city and sustainable development.</p> <p>(d) We opened the Tung Chung Community Liaison Centre (CLC) in November 2021 for the public to visit by appointment. Some venues of the CLC can also be reserved for non-governmental organisations and schools to hold events, so as to share the space for public enjoyment.</p>
Education	<p>(a) We have arranged guided tours and school talks since the new semester in September 2021 to promote the work and projects of SLO, including the artificial islands in the Central Waters, to allow students to have a better understanding of Lantau’s conservation and sustainable development.</p> <p>(b) We collaborated with the World Wide Fund for Nature Hong Kong to organise five sessions of “Shoring Up Shui Hau” public engagement activities from July to September 2021. Roving education kiosks were set up in Shui Hau to disseminate conservation messages and to promote the importance of conservation of coastal areas in Shui Hau.</p>
Promotion	<p>(a) We organised the “Green Living @ Lantau” roving exhibition at various districts from November 2020 to August 2021 as well as a thematic exhibition featuring interactive games, videos and artworks at City Gallery in June 2021 to publicise the work of SLO on promoting green living in Lantau. The exhibition materials were also uploaded to SLO’s website.</p> <p>(b) We organised a site visit on “Reclamation and</p>

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Activity	Latest Work Progress
	<p>advance works of Tung Chung New Town Extension” for the LegCo Panel on Development in April 2021 to introduce the advanced reclamation and construction technologies used in the TCNTE project to the LegCo members.</p> <p>(c) We have been regularly promoting the conservation and sustainable development of Lantau through online platforms, such as websites and Facebook. In particular, we have promoted SLO’s development and conservation work in Lantau through the Secretary for Development’s Blog. Besides, we have launched our Instagram page in September 2021 to share interesting information about Lantau and the relevant projects with the public.</p> <p>(d) We collaborated with the Construction Industry Council to produce videos and organise online talks, in October and November 2021 to promote the TCNTE project and the innovative technologies used in the TCE reclamation so as to enhance public understanding of smart low-carbon city and sustainable development.</p> <p>(e) We organised roving exhibitions at City Gallery in October 2021 and CLC from November 2021 to January 2022 respectively to showcase the first round approved projects of LCF and introduce the operation of the LCF. We also organised a briefing in November 2021 for next round of potential applicants on LCF’s key facts, application procedures and points to note.</p>

CONCLUSION

9. Members are invited to note the work progress of SLO.

Civil Engineering and Development Department
June 2022

**Approved Conservation and Related Projects of
Lantau Conservation Fund 2020-2021**

Grantee	Project Title (Reference Number)	Approved Amount (HK\$)
Conservation Management Agreement Projects		
The Hong Kong Bird Watching Society	Between Mountain and Sea - Nature Conservation Management for Shui Hau (MA-2020-01)	12,891,800
The Chinese University of Hong Kong	Regenerating Shui Hau: Developing sustainable village revitalization in Lantau South through heritage restoration, cultural conservation and village co-operatives (MA-2020-02)	11,936,300
Research Projects		
The Hong Kong Polytechnic University	Enhancement of marine biodiversity and ecosystem functioning along Lantau eco-shoreline with low-pH sea-sand seawater eco-engineered seawall panels (RE-2020-08)	2,269,000
Lingnan University	A comprehensive survey of the diadromous animals of Lantau: assessment of distribution, population status, and conservation strategies (RE-2020-12)	1,785,000
The Conservancy Association	Characterizing mangrove functions in Tai O – an integrated approach from environmental and cultural perspectives (RE-2020-14)	1,879,700
Hong Kong Baptist University	Diversity, abundance and distribution of epifauna from southern Hong Kong waters (RE-2020-22)	2,298,500
Hong Kong Baptist University	The Legend of Shek Pik - Lantau Stories under Water (RE-2020-23)	2,500,000

(Translated Version)

Grantee	Project Title (Reference Number)	Approved Amount (HK\$)
The Hong Kong Bird Watching Society	Baseline Study of Avifauna along South Lantau Coast with Application of Bioacoustics and Study of Human Disturbance (RE-2020-25)	947,020
The Hong Kong University of Science and Technology	Community-Centered and Intergeneration-Based Heritage Conservation: Case Studies of the Farmers Village in Santau and the Fishermen Community in Tai O, Lantau (RE-2020-28)	2,450,360
The Hong Kong University of Science and Technology	Research, Record, and Publication of Inscriptions in Tai O (RE-2020-30)	964,000
The University of Hong Kong	Villages, Monasteries, and Valley Ecology: Rehabilitating the Cultural Landscapes and Architecture of Tung O Trail (RE-2020-36)	2,384,800
City University of Hong Kong	Towards sustainable clam digging - estimating carrying capacity and assessing effects on clam populations and the macroinvertebrate community (RE-2020-39)	1,973,220
Education and Engagement Projects		
Land Education Foundation Limited	Mui Wo Agricultural Community and Terroir Revitalizing Project (EE-2020-02)	1,734,320
The Conservancy Association	San Tau nature conservation and sustainable use of nature resources – an education and engagement project (EE-2020-04)	1,985,600
The Green Earth Limited	"Hike in Lantau, Cherish Lantau" Trail Environmental Education Programme (EE-2020-14)	1,682,860
The Hong Kong University of Science and Technology	Tai O Field School (EE-2020-16)	1,480,800

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Grantee	Project Title (Reference Number)	Approved Amount (HK\$)
Outdoor Wildlife Learning Hong Kong Limited	Lantau Countryside Ecological and Cultural Education Programme (EE-2020-20)	1,729,795
UOW College Hong Kong	Integrating Biodiversity and Ethnobotanical Perspectives of Fung Shui Woods on Lantau Island: Capacity Building Towards a Fuller Appreciation of Culturally Protected Forests (EE-2020-22)	1,999,700
	Total Amount:	54,892,775

Note: The distribution of approved conservation and related projects is at **Figure 1**.

**Approved Minor Local Improvement Works under
Lantau Conservation Fund in 2020 and 2021**

Approval Year	Department	Project Title
2020	WSD	Water Supply to Remote Village – Tai Long, Chi Ma Wan Peninsula, South Lantau
2020	CEDD	Improvement Works for Hiking Facilities in Ngong Ping
2020	CEDD	Improvement of Hiking Trails and Facilities near Lantau Peak, Sunset Peak and Pak Kung Au
2021	DSD	Rehabilitation of Fish Ladder at Pak Ngan Heung Stream
2021	HAD	Village Access and Associated Intercepting Drain at Shek Mun Kap Village
2021	CEDD	Removal of Sonneratia species at Tung Chung, Shui Hau and Pui O
2021	CEDD	Natural Stream Restoration Works at Pui O Au
2021	LCSD	Incorporation of Renewable Energy Technologies (Solar Lamp Pole) and Associated Improvement Works at Pui O Campsite and Pui O Beach
Approved Sum (HK\$):		Approx. 68,000,000

Note: The distribution of approved minor local improvement works refers to **Figure 2**.



