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For advice on 13 February 2026

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

Reclamation at Lung Kwu Tan

PURPOSE

This paper presents the key findings and recommendations of the Environmental Impact Assessment (EIA) report for the "Reclamation at Lung Kwu Tan (LKT)" ("the Project") submitted under Section 6(2) of the Environmental Impact Assessment Ordinance (EIAO) (Application No. EIA-319/2025). The Civil Engineering and Development Department (CEDD) ("the Applicant") and its consultants will present the EIA report at the meeting of the EIA Subcommittee.

ADVICE SOUGHT

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

BACKGROUND

3. The Project is a strategic initiative under the "Hong Kong 2030+" strategy and the "10-year Formation Forecast of Spade-ready Sites" to address medium-to-long term land supply needs. Located at the western end of the New Territories, LKT offers extensive sea frontage and connectivity to the Northern Metropolis and the Greater Bay Area, positioning it ideally for industries such as advanced construction and green/new energy.

4. The Project involves near-shore reclamation of approximately 145 hectares (ha) at northern LKT (**Figure**), rearrangement of the Urmston Road submarine outfall, dredging for potential future berthing facilities, and associated site formation works. Construction is tentatively scheduled to commence in 2028, with land delivery starting in stages from 2029-2030 and completion targeted for 2035.

5. This EIA covers the LKT reclamation. Separate EIAs will follow for the River Trade Terminal reclamation, future top-side developments, and the sea-crossing bridge. Prior to this EIA report submission, CEDD and Planning Department (PlanD) jointly conducted the "Planning and Engineering Study for LKT Reclamation and the Re-planning of Tuen Mun West (TMW)", considering the entire LKT and TMW study areas cumulatively. While detailed designs for the River Trade Terminal reclamation, future top-side developments and sea-crossing bridge are going on, the EIA report for this Project has addressed potential cumulative environmental impacts. For instance, the water quality impact of the construction of the sea-crossing bridge is considered insignificant within the bay area. Measures to manage cumulative impacts under LKT and TMW will be coordinated. Separate EIA reports for the River Trade Terminal reclamation, future top-side developments and sea-crossing bridge will include detailed assessments and measures for mitigating their cumulative impact, phasing, and programme arrangement.

6. The Applicant submitted on 31 October 2025 the EIA report for the Project for approval under the EIAO. The DEP, after taking advice from relevant authorities, considered that the EIA report met the requirements of the EIA Study Brief (SB) of the Project (No. ESB-367/2024) and the Technical Memorandum on EIA Process (TM), for the purpose of its exhibition for public inspection under Section 7(4) of the EIAO.

NEED FOR THE PROJECT

7. Located at the western end of the New Territories, LKT has the advantage of extensive sea frontage and close proximity to the Northern Metropolis, the Hong Kong International Airport and the Pearl River Delta region, with excellent transport connectivity, and strategically positioned for industries with growth potential, such as green/new energy, and advanced construction, etc.

8. With reference to Policy Address 2025, proposed green/new energy development (including green maritime fuel and sustainable aviation fuel) aligns with the Government's carbon neutrality target before 2050 and combating climate change. The proposed green/new energy development on the reclaimed land will be further formulated and covered under separate EIA study.

DESCRIPTION OF THE PROJECT

9. The Project involves near-shore reclamation of approximately 145 ha at the north of LKT, together with associated works including:

(a) Rearrangement of submarine outfall at Urmston Road and associated works (e.g. emergency discharge and foreshore chamber);
(b) Dredging works for provisioning of possible future berthing facilities and submarine pipe laying works; and
(c) Site clearance and site formation works on existing lands adjacent to the proposed reclamation.

10. The Project constitutes a Designated Project (DP) by virtue of the following items in Schedule 2 of the EIAO: -

(a) Item C.1 – "*Reclamation works (including associated dredging works) more than 5 ha in size*";
(b) Item C.12 – "*A dredging operation that is — (a) with a dredging volume of more than 500 000 m^3*";
(c) Item F.5 – "*A submarine sewage pipeline with a diameter of 1 200 mm or more and a length of 1 km or more*"; and
(d) Item F.5 – "*A submarine sewage outfall*".

ENVIRONMENTAL BENEFITS

11. The EIA report concludes that construction and operation of the Project will be fully compliant with EIAO requirements with no adverse residual environmental impacts. Key environmental benefits include:

(a) Adopting Eco-shoreline to Conserve and Enhance Natural Resources
The project design includes two green channels with 2 km of eco-shorelines to the north and east of the LKT reclamation area, preserving over 2 km of natural shoreline. Features like precast tidal pools, rocky shoreline with textured panels, and oyster baskets will be incorporated. Exploration of adding mangroves to the eco-shoreline will be included during detailed design. This system aims to enhance the ecological value of seawall structures by increasing habitat complexity.

(b) Land Supply and Enhancing Economic Competitiveness
The proposed 145 ha near-shore reclamation will create new land with approximately 1.3 km of western berthing frontage and marine access. Strategically positioned, the land will facilitate the growth of industries like green energy and advanced construction. Leveraging LKT's advantageous location near the Northern Metropolis, Hong Kong International Airport, and the Pearl River Delta Region, the future top-side developments will enhance collaborations with Mainland cities.

(c) Fostering Carbon Neutrality

The planned green/new energy development on the reclaimed land at LKT aligns with the Government's goal of reaching carbon neutrality by 2050. As outlined in the Policy Address 2025, future low-carbon energy options could encompass green maritime fuels like methanol, ammonia, hydrogen, and sustainable aviation fuels. Detailed planning for these green/new energy land uses will be refined and addressed in the subsequent EIA study at a later stage.

(d) Improving Existing Environmental Conditions

The Lung Kwu Sheung Tan (LKST) area is predominantly occupied by brownfield sites with small-scale wastewater treatment facilities, resulting in poor water quality in some watercourse sections. The topside development at LKT will introduce public sewers, new sewage treatment works, and dry weather flow interceptors. This comprehensive planning will modernise the area, improving local environmental conditions. Additionally, a sea-crossing bridge (subject to a separate EIA) is proposed to connect the LKT reclamation area to Lung Mun Road, enhancing connectivity.

CONSIDERATION OF ALTERNATIVE OPTIONS

12. The EIA has evaluated different options for reclamation extent and configuration, outfall alignment and discharge location, construction methods, and construction sequence to avoid and minimise environmental impacts. Key approaches include:

Avoidance of Impact

13. The current proposed reclamation extent has been significantly reduced from the initial 250 ha to 145 ha. This reduction minimises the reclamation footprint and avoids the water body in front of LKT Village, thereby preserving the existing natural shoreline at LKT beach and minimising environmental impact. The selected reclamation option strategically avoids key Chinese White Dolphin (CWD) habitats and deeper water areas where CWDs are more likely to utilise, while also reserving a wider corridor for CWD movement and travel.

14. The selected reclamation configuration has been carefully designed to avoid any direct impact on recognised sites of conservation importance, including Marine Parks and Sites of Special Scientific Interest (SSSI). To preserve natural watercourse ecosystems at LKST and maintain natural shorelines, two green channels with eco-shorelines will be provided. Additionally, the configuration avoids commercial fisheries spawning grounds at North Lantau, oyster farming areas in Deep Bay, artificial reef deployment sites, and shellfish reef locations, demonstrating a comprehensive approach to environmental protection and conservation.

Minimisation of Impact

15. The Project will employ non-dredged methods, such as Deep Cement Mixing (DCM), for the reclamation works to minimise dredging activities and their associated potential impacts on water quality, marine ecology, and fisheries. The reclamation will be conducted in phases, with the initial phase commencing from both the northern and southern portions of the reclamation area with the provision of leading seawalls to confine the dispersion of suspended solids. Simultaneously, reclamation with temporary seawalls will commence in the middle of the nearshore area of the reclamation site. Reclamation filling operations will only be undertaken behind the leading seawalls to minimise operational water quality impacts.

16. The selected submarine outfall alignment provides a greater separation distance from the Deep Bay Water Control Zone compared to another alignment option considered in the EIA. The discharge locations of the rearranged submarine outfall are positioned further away from the Sha Chau and Lung Kwu Chau Marine Park compared to the current locations. To further reduce environmental impact, a hybrid mode combining DCM with partial-depth open-cut trench excavation will be adopted for the rearrangement of the submarine outfall, reducing dredging volume by approximately 65% when compared to the full-depth open-cut trench excavation method.

SPECIFIC ENVIRONMENTAL ASPECTS TO HIGHLIGHT

Ecology

Marine Ecology

17. The reclamation area has been designed to avoid encroaching on sites of conservation importance, maintaining a distance of approximately 1.6 km from the nearest Marine Park (Sha Chau and Lung Kwu Chau Marine Park) and avoiding deeper waters where CWDs are more likely to utilise. The EIA reviewed the past 9 years' baseline information (from 2016 to 2024) of the Agriculture, Fisheries and Conservation Department (AFCD) and conducted a 12-month survey from 2024 to 2025 demonstrating that CWDs are found mainly in western and southwestern waters of Lantau Island with stable population trends, and the Project site is not a major CWD habitat. An extract and a summary of AFCD's annual abundance estimates of CWD is attached in **Annex**. Nevertheless, comprehensive protective measures will be implemented, including marine mammal exclusion zones with a 250 m radius from dredgers and DCM barges monitored by marine mammal observers, smart initiatives such as AI-powered cameras at work barges and land-based locations to support marine mammal watching, adoption of eco-shorelines to foster biodiversity and enhance food availability for CWDs, and a 10-knot speed limit for construction vessels traveling along major fairways without entering marine parks to minimise vessel collision risks.

18. The proposed eco-shorelines comprising various eco-features will be incorporated at the green channels, and based on experience from the Tung Chung New Town Extension, such designs can support diverse marine life. Prior to reclamation commencement, an Eco-shoreline Study Report will be submitted to determine the appropriate eco-shoreline design, followed by 12-month post-completion monitoring to evaluate ecological performance.

19. Surveys recorded common coral species in low abundance along the coastline from Black Point to LKT, one horseshoe crab at Black Point (outside the Project Site), and some seahorses, with no indication that the area serves as a nursery ground or important habitat for these species. As a precautionary measure, a pre-construction subtidal survey will be conducted prior to marine works commencement, and if any species of conservation importance is found, a translocation plan detailing practicability and procedures will be prepared and submitted.

Terrestrial Ecology

20. Given the high mobility of the bird species recorded within the project area, such as egrets and herons which typically forage within a range of about 2-7 km, and the presence of nearby habitats with similar conditions, it is not expected that the Project will adversely impact the foraging or resting opportunities of these birds. Surveys conducted for this EIA also noted that most of these birds flew at altitudes of around 5-10 m above ground, with the ability to reach heights exceeding 30 m, demonstrating strong flight capabilities and the ability to adjust their flight paths to avoid obstacles. During the construction phase, a separation distance of approximately 200 m between marine-based DCM barges and 50 m between land-based DCM plants will be maintained, minimising any detours needed to avoid machinery and to reach foraging areas, thus reducing the potential displacement of bird flight paths. Furthermore, the Project design includes two green channels to maintain hydraulic connectivity between the existing watercourse and the sea and these green channels may also serve as flight corridors for the birds.

21. A pre-construction survey at the LKST Egretry will be carried out during the breeding season (February to August) before construction begins. If the egretry is found to be active, appropriate measures will be taken, including avoiding nighttime activities within 100 m of the egretry. Ecological monitoring will also be conducted during construction, with mitigation measures such as quieter construction methods, directed lighting, and non-reflective materials to minimise potential disturbances. In the future planning of the topside development at LKT, a stepped building-height profile, lower near the LKST Egretry, will be considered to further reduce the potential displacement of bird flight paths.

22. For the Small Cabbage White butterfly, a species of conservation importance found within the land-based works area, no significant impacts are expected due to its low abundance in the assessment area and the presence of alternative habitats nearby.

Water Quality

23. Prior to marine-based works, comprehensive water quality protection measures will be implemented, including advance installation of silt curtains and temporary or permanent seawalls to enclose marine filling works. The proposed reclamation will be carried out in phases, commencing from the northern and southern boundaries as well as the middle area where temporary seawalls will confine suspended solids dispersion. Permanent seawalls will be constructed along the western boundary, with reclamation filling proceeding inwards progressively as seawalls advance. Construction works near the existing submarine outfall will only commence upon switchover to the new alignment, targeted for 2031, with full reclamation enclosure by 2033. With mitigation measures including optimised construction sequencing, controlled marine filling and dredging rates, advance seawall construction, and silt curtain deployment, hydrodynamic and water quality modelling demonstrates no adverse impacts during construction or operational phases.

24. The Eco-shoreline Study Report will include an implementation programme detailing management and maintenance responsibilities throughout construction and proposing a long-term operational framework, addressing water quality and green channel performance strategies, auditing mechanisms, and protocols for removing floating refuse and oil. Two large boulders within the eastern green channel will be removed to improve water movement. During construction and the 12-month post-construction monitoring period, CEDD will manage and maintain the reclamation area and green channels, conducting regular inspections and refuse removal while exploring methods to minimise marine aesthetic impacts. Following monitoring completion, CEDD will evaluate results to develop long-term maintenance recommendations and collaborate with the Marine Department to implement these measures, including referral of floating refuse issues identified during routine inspections for appropriate action according to established government protocols.

Fisheries

25. The reclamation area has been strategically positioned to avoid commercial fisheries spawning grounds at North Lantau (approximately 1.3 km away), oyster farming areas in Deep Bay (approximately 2.9 km away), and AFCD designated fish culture zones, with the closest being over 15 km away. The project also avoids artificial reef deployment sites and shellfish reef locations, and no recognised important nursery areas for commercial fisheries resources exist within the assessment area. According to the EIA report, the potential for the proposed reclamation area to function as an important spawning ground or nursery area is low, and consequently, the significance of impact from the loss of fisheries habitats and fishing grounds after reclamation completion is considered minor. Nevertheless, comprehensive mitigation measures will be implemented to minimise fisheries impacts. Non-dredged methods will be adopted for reclamation works using uncontaminated marine fill, preventing the release of sediment-bound nutrients, while good site practices will ensure safe storage, handling, and disposal of

chemicals and oils to prevent marine environment contamination. Two green channels planned at the north and east of the reclamation area will incorporate eco-shorelines along their boundaries, providing beneficial functions to local ecosystems and supporting the fisheries industry by creating suitable microhabitats for recolonisation of marine fauna, benefiting juvenile fish recruitment and providing substrates for fisheries enhancement. Additional ecological enhancement features, including artificial reefs, oyster shell reefs, and restocking of fish fry and shellfish, will be considered during detailed eco-shoreline design to further enrich marine biodiversity and support ecological functions. Water quality monitoring during construction will provide additional protection against fisheries impacts, ensuring no unacceptable residual fisheries impacts occur during construction, post-construction, or operational phases of the Project.

Landscape and Visual

26. No registered Old and Valuable Trees were identified within 100 m of the Project Site, while two Trees of Particular Interest identified outside the Project Site will be retained. Approximately 100 trees within the Project Site, generally in poor condition with low amenity value, are proposed for removal and will be compensated on a 1:1 ratio through planting on the newly reclaimed land and other suitable areas within the Project boundary, ensuring no net loss of tree resources.

27. As for visual impact, the duration of public viewers at identified viewing points is transient or relatively infrequent, comprising hikers and recreational visitors. Mitigation measures including hydroseeding and sensitive landscape design of reclamation edges will be implemented to minimise visual impact, and no unacceptable residual landscape and visual impacts are expected during the post-construction phase.

Other Environmental Aspects

28. No built heritage is identified within the land-based works area or 50 m from the land-based works area. Despite slight overlapping with the LKST Site of Archaeological Interest, the main beach is considered of low archaeological potential. For the north western area of terrestrial archaeological impact assessment study area, the archaeological potential is also expected to be low. In addition, no recorded sites or shipwrecks were identified within or in the vicinity of the marine archaeological investigation study area, and no items of high archaeological potential were identified.

29. The potential impacts of other environmental aspects including air quality, noise, waste management and land contamination have also been assessed in the EIA report. With the implementation of recommended mitigation measures, the Project will comply with the relevant requirements of the EIA SB and the EIAO-TM and adverse environmental impacts are not anticipated.

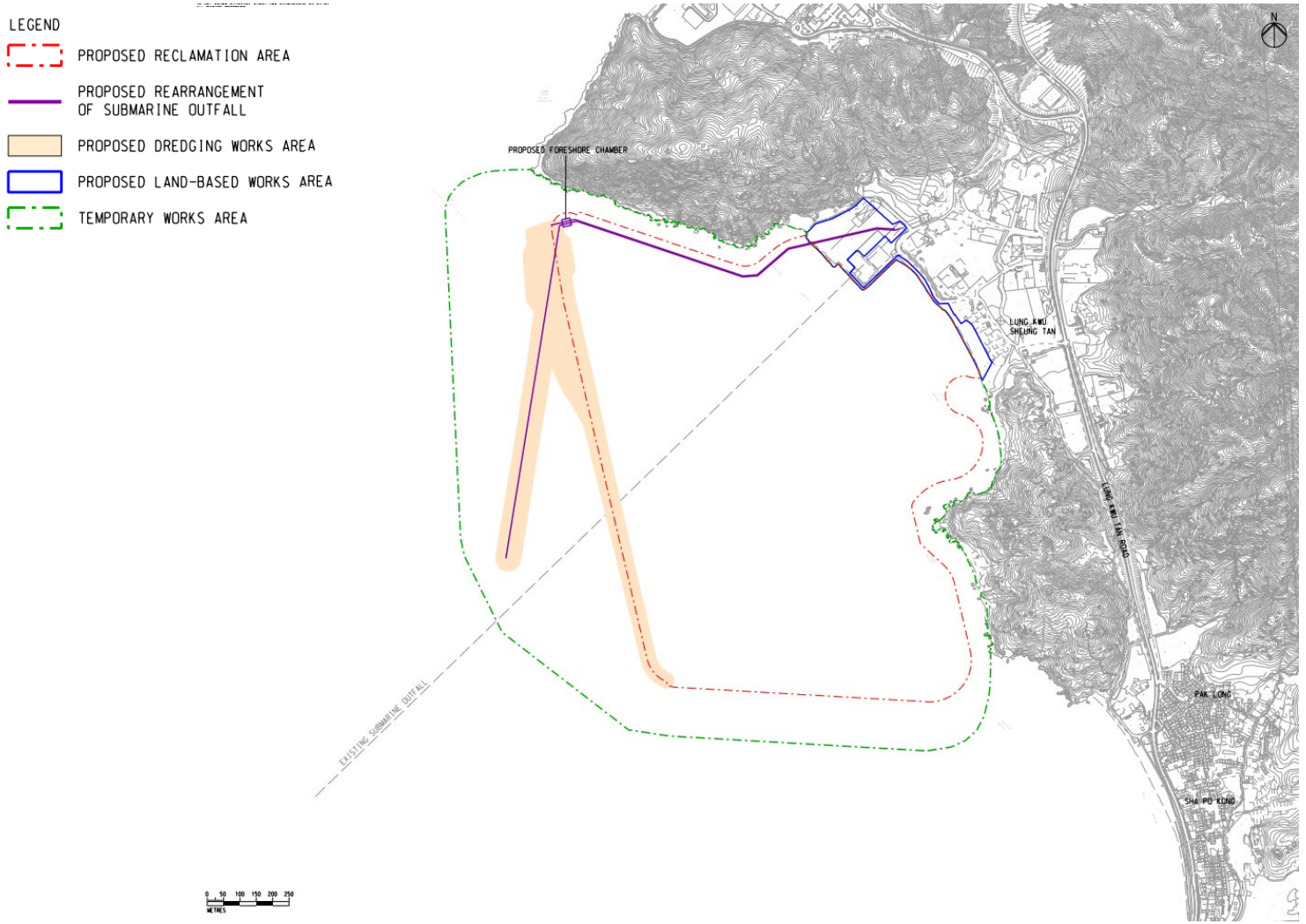
ENVIRONMENTAL MONITORING AND AUDIT

30. The EIA report has included an Environmental Monitoring and Audit (EM&A) Manual, which recommends an EM&A programme for the Project, including continuous construction dust monitoring, water quality monitoring during construction and post-construction phases, construction ecological monitoring at LKST Egretry, marine mammal watching by marine mammal observer and with the use of smart initiatives as well as site audit and inspection on other aspects.

PUBLIC CONSULTATION

31. The Applicant has made the EIA report, EM&A Manual and Executive Summary available for public inspection under the EIAO from 2 January 2026 to 31 January 2026. A summary of all the public comments received by the Environmental Protection Department during the public inspection period and a gist of the main concerns raised in the public comments will be provided separately.

February 2026
Environmental Assessment Division
Environmental Protection Department



Project Title:	**Reclamation at Lung Kwu Tan**	**EIA Application No.: EIA-319/2025**	
Figure	**Reclamation Area and Works Area** [Remark: This figure is prepared based on Figure 2.2 of the EIA report]		

Annex – Extract and summary of AFCD's annual abundance estimates of Chinese White Dolphins (CWDs)

Year	Annual abundance estimates of CWDs in 2016 to 2024
2016	47
2017	47
2018	32
2019	52
2020	37
2021	40
2022	34
2023	34
2024	38

Remarks:

1. The data is extracted from AFCD's Report on Monitoring of Marine Mammals in Hong Kong Waters.