

**Tung Chung New Town Extension (TCNTE) –
Professional Liaison Group (PLG)**

Notes of 4th Meeting

Date: 18 January 2021 (Monday)
Time: 2:30 pm to 3:45 pm
Venue: Video Conferencing

Members present:

Mr IP Wai-man, Raymond (Chairman)	Deputy Head (Works) Sustainable Lantau Office (SLO), Civil Engineering and Development Department (CEDD)	
Mr LO Siu-keung (Secretary)	Senior Engineer SLO, CEDD	
Ir Thomas C T CHAN	Environmental Division, HKIE	
Prof. Kenneth MY LEUNG	Department of Chemistry, CityU	
Ms Mandy LO	Ocean Park Conservation Foundation Hong Kong	
Prof Jianwen QIU	Department of Biology, HKBU	
Dr Cynthia YAU	Department of Ocean Science, HKUST	
Mr WONG Kwok-fai, Alfred	Chief Engineer SLO, CEDD	) Project Team
Mr CHEUNG Kin-tak, Henry	Senior Geotechnical Engineer SLO, CEDD	) Project Team
Mr CHEUNG Pak-kin	Senior Engineer SLO, CEDD	) Project Team
Mr HO Hei-ming, Bryan	Senior Engineer SLO, CEDD	) Project Team
Mr LAI Ho-keung, Stanley	Engineer SLO, CEDD	) Project Team
Mr WO King-tai	Marine Conservation Officer SLO, CEDD	) Project Team

Mr Jovy TAM	Environmental Team Leader, ERM-Hong Kong, Limited	) Environmental Team
Mr Kelvin So	Deputy Environmental Team Leader, ERM-Hong Kong, Limited	) Environmental Team
Mr Manuel CHUA	Independent Environmental Checker, Black & Veatch Hong Kong Limited	) Independent Environmental Checker
Mr Ivan TING	Deputy Independent Environmental Checker, Black & Veatch Hong Kong Limited	) Independent Environmental Checker
<u>In attendance:</u>		
Mr Chris HO	Senior Project Engineer, AECOM (Asia) Company Limited	) Project Consultant
Mr Frankie FAN	Principal Resident Engineer, AECOM (Asia) Company Limited	) Project Consultant
Mr Chris CHEUNG	Senior Resident Engineer, AECOM (Asia) Company Limited	) Project Consultant

- 1 Welcome and Introduction** **Responsible**
- 1.1 The Chairman welcomed members for attending the fourth meeting of the PLG. As there were new members in the 2nd term of appointment of the PLG, the Chairman briefed members about the purpose of setting up the PLG and its terms of reference.
- 2 Presentation**
- 2.1 The Secretary gave a briefing on the overall development plan of the TCNTE project.
- 2.2 Progress of Reclamation Project
- 2.2.1 The Project Consultant provided an overview of the Tung Chung East reclamation contract and briefed members on the construction progress. The Project Consultant presented the key environmental design of the project, including deep cement mixing method, eco-shoreline and real time trucks monitoring system. The Project Consultant also introduced the mangrove / rocky eco-shoreline trial at Siu Ho Wan.
- 2.2.2 In response to the recommendations of members in the last meeting, the Project Consultant reported that the following enhancement works were implemented in the eco-shoreline trial.

- i. providing rough surface with drill-holes on bio-blocks for better establishment of marine organisms;
- ii. improving water retention of rock pool;
- iii. watering mangroves with fresh water; and
- iv. placing rip rap at the opening of sea wall blocks to reduce erosion of mudflat.

2.2.3 The Project Consultant also advised that testing of sediments collected at Mai Po was completed. The results showed that the sediment contained contaminants, therefore it was considered not suitable for uses of mudflat production for mangroves.

2.2.4 Project Consultant reported the current construction progress and forecast the works in the next two years. Moreover, newsletters were published quarterly for disseminating first-hand project information to the public and stakeholders.

2.3 Environmental Monitoring and Audit

2.3.1 The Environmental Team (ET) introduced the Environmental Monitoring and Audit (EM&A) for the project, including management organization, environmental permit and associated documents, and environmental mitigation measures.

2.3.2 The ET provided a summary of the environmental monitoring results, covering air quality, noise level, water quality and ecology. No project-related exceedance was recorded so far for all parameters.

2.3.3 A table showing the environmental related complaints received was presented to members. The majority of the recent complaints (July to December 2020) were related to air quality. Actions including additional wheel washing facility, road cleaning, water spraying and covering stockpiles were adopted to mitigate the impacts and the number of complaints reduced afterwards.

3 **Discussion**

3.1 After the presentation, members raised the following questions and the responses from CEDD/ET/IEC/Project Consultant were summarized below.

Eco-shoreline design and site trial

3.1.1 CEDD advised that the total length of the proposed eco-shoreline was about 3.8 km. The eco-shoreline trial was conducted at Siu Ho Wan in a small scale with a view to refining the design of eco-shoreline and selecting the most suitable mangrove species to be planted. The

proposed mangrove eco-shoreline would be provided along the sloping seawall and exposed to the aggressive marine environment. The design was different from the one in Tai O where mangroves were well protected by the shelter.

- 3.1.2 CEDD reported that two species, namely *Kandelia obovata* (水筆仔) and *Avicennia marina* (白骨壤), in the site trial showed a better survival/growth rate among the six mangrove species. The site trial had just been completed and the survey data was under review. CEDD would optimize the design of eco-shoreline with reference to the monitoring and survey findings. CEDD
- 3.1.3 A member suggested providing stepped platforms for the mudflat to facilitate the formation of level difference within the tidal zone. Another member opined that the two better grown species were pioneer species and slope profile of mudflat would favour the growth of other kinds of mangroves at the back and increase species diversity. CEDD thanked members for the suggestions and would review the design taking into account their suggestions. CEDD
- 3.1.4 CEDD advised that the enhancements of eco-shoreline trial recommended by members in the last PLG meeting were very effective in improving the growth of mangroves. The provision of drill holes and rough surface on bio-blocks allowed more marine lives to settle and grow. The design for water retention and bio-block enhancement for eco-shoreline would also be reviewed. CEDD
- 3.1.5 A member reminded that the depth of drill holes on bio-blocks should be set appropriately. Otherwise, the holes would be filled with mud, thus reducing the effectiveness.

EM&A Monitoring

- 3.1.6 The ET advised that they investigated every exceedance case carefully by comparing the monitoring data with control stations, as well as reviewing the construction activities and mitigation measures being implemented to determine whether the exceedance was project-related or not. In respect of the exceedance in Suspended Solids (SS) observed in October 2019 for water quality monitoring, the ET indicated that according to their investigation, the exceedance in SS was not project-related. The exceedance was found at the monitoring station TCE-WQM1 which was located near the Tung Chung New Development Pier. The SS exceedance was considered to be caused by the marine traffic at the pier. Hence, no further action was taken.

- 3.1.7 Regarding the observed exceedance cases in relation to Dissolved Oxygen (DO), the ET advised that the exceedance was due to seasonal variations, particularly in the summer season when water stratification occurred because of difference in water temperature, resulting in poor mixing and low DO at the seabed. Based on the water quality review, similar drops in the DO levels were also recorded in other water quality monitoring stations, which were located at various sides of the site. It indicated that the exceedance cases were not project-related. Thus, no repeated in-situ measurement was conducted.
- 3.1.8 In response to the query from a member regarding the noise level monitoring, the ET advised that according to the EM&A Manual of the project, Action Level would be triggered when one documented complaint was received.
- 3.1.9 The ET would provide details of any project-related exceedance cases with the associated mitigation measures for members' reference in the next meeting. ET
- 3.1.10 The ET advised that despite the observed decrease in the number of small horseshoe crab (<2cm) during 2019 to 2020 in Tung Chung Bay, there was no sign of decreasing trend of small horseshoe crab found in Tai Ho Wan which was closer to the project area. Hence, the decrease of the number of small horseshoe crab in Tung Chung Bay was unlikely related to the reclamation works. Nevertheless, the ET would keep on monitoring the water quality, site activity and ecological survey findings for identification of possible causes of change of small horseshoe crab population, and determine mitigation measures as appropriate. ET
- 4 AOB**
- 4.1 In response to a member's suggestion, CEDD would consider arranging site visits to the eco-shoreline for stakeholders after the pandemic. CEDD
- 4.2 Members requested for a copy of the presentation slides for reference.
- (Post Meeting Notes: A softcopy of the presentation material was emailed to members for reference on 18 January 2021.)
- 4.3 A member enquired about the development permission area plan issued by Town Planning Board for San Tau and Sham Wat.

(Post Meeting Notes: The information regarding the development permission area plan of San Tau and Sham Wat were provided to all the PLG members via email on 22 January 2021.)

- 4.4 The Chairman thanked the members for their valuable comments and recommendations in respect of the EM&A, eco-shoreline design and site trial for the TCNTE project.

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