



BY EMAIL ONLY

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20th July, 2020

Dear Sirs / Mesdames,

Green Groups' Joint Response to Tung Chung Line Extension

1. The Tung Chung Line Extension Project (hereinafter referred to as “the Project”), with part of its footprint situated on or in immediate vicinity of the Wong Lung Hang mangrove stand, which is an integral part of the unique and ecologically sensitive Tung Chung River-cum-Bay system, would directly impact the fragile system through habitat destruction, or indirectly through pollution and vandalism during the construction and operational phases. The undersigned groups are gravely concerned about its impacts and would like to reiterate our requests for:

Adoption of alignment which avoids impacts on natural coastal habitats and Ma Wan Chung village

2. According the Project Profile (Section 3.1.1 & Figure 1) of the Project, an underground tunnel constructed by Tunnel Boring Machine (TBM) will pass underneath sensitive coastal habitats, including an estuary, mudflat and mangrove stands, and the village with well-preserved rural character at Ma Wan Chung (Appendix 1).

3. The EIA report of Tung Chung New Town Extension (TCNTE EIA, EIA Register No.: AEIAR-196/2016) stated that mudflats and mangroves ranked “High” and “Moderate to High” in overall ecological value respectively (section 9.4.11), and species of conservation concern, including the Chinese Horseshoe Crab (中國鬚 *Tachypleus tridentatus*, listed as “Endangered” on the IUCN Red List), have been previously recorded at the Ma Wan Chung mudflat (section 9.4.4).
4. Given unstable geological characteristics of coastal regions (i.e. soft and shallow sediments) and sensitivity of these habitats, we are highly concerned that the construction would cause adverse impact on these areas and the coastal village.
5. We request full consideration of alternative alignments of the proposed railway so that encroachment or damages to sensitive habitats around Tung Chung River-cum-Bay and the coastal village can be avoided. Any proposed alignment should be justified by comprehensive assessments on the environmental and hydrological impacts to Tung Chung River-cum-Bay area.

Avoidance of encroachment into environmentally sensitive areas / habitats of important species

6. As stated in the Project Profile (section 1.4.2), the underground Tung Chung West Station and its associated structures “are proposed to be located at the existing rural area to the west / south-west of Yat Tung Estate and around Yu Tung Road”. The associated structures (e.g. above-ground entrances, vent shafts etc.), although exact locations not mentioned, highly likely affect Areas 38A, 38B (both designated as “Commercial” zone) and 98A (“Coastal Protection Area” or “CPA”) within the Approved Tung Chung Valley Outline Zoning Plan (TCVOZP, S/I-TCV/2) (Appendix 1), especially when a public transport interchange (PTI) is proposed in Area 38A as stated in the Explanatory Statement (section 7.1.5) of the TCVOZP. The Emergency Access Point (EAP) / Emergency Egress Point (EEP) building is also proposed at the hillside along Tung Chung Road North (Project Profile section 1.4.3).
7. Currently Areas 38A, 38B and 98A are mostly covered by woodland, mangrove stands and a small stream flowing into the mangroves among some rural structures. The locally uncommon dragonfly Mangrove Skimmer (斑灰蜻 *Orthetrum poecilops*), which is currently classified as “Vulnerable” on the IUCN Red List, was recorded around the areas annually by Green Power between 2015-2019. Mating behavior has also been observed. This indicates the areas are likely its core habitat, and any habitat destruction or degradation may threaten the survival of the population.
8. The proposed site for the EAP/EEP, according to the TCNTE EIA (Figure 9.4c) is mainly covered by mature and young secondary woodlands, with the former ranked as “Moderate to High” in overall ecological value (section 9.4.11). The proposed locations of the station and other associated structures are also in vicinity to lowlands around Tung Chung River-cum-Bay where the endemic Romer’s Tree Frog (盧氏小樹蛙 *Liuixalus romeri*, listed as “Endangered” on the IUCN Red List) is frequently recorded.
9. The general planning intention for area within the TCVOZP is “to conserve the ecologically sensitive areas, to protect the rural and natural character, to maintain the unique landscape character and cultural heritage of the Area” (first half of Section 8.1 of the Explanatory Statement). It is clear that any ecological data revealing the values of the habitats should be recognized, and that land use zonings intended for habitat protection should be observed in any development proposals.
10. We strongly call for avoidance of these ecologically important areas and their vicinity (including Areas 38A, 38B, all CPAs, CAs, freshwater bodies, secondary woodlands and areas with important species recorded in any ecological studies) within TCVOZP as site options for any structures associated with the station, including above-ground entrances, vent shafts etc. Also, the project proponent, including its contractors, subcontractors and associated service providers shall not use areas covered by TCVOZP and areas 35, 42, 43, 44, 45A, 46, 47, 49 covered by the Tung Chung Town Center Area Outline Zoning Plan (TCTCOZP, S/I-TCTC/23) as construction sites (see Appendix 1), including but not limited to works areas, site offices, barging points, vehicle parking, equipment and C&D material storage spaces or other related activities. The boundaries of these sites shall also be well defined and maintained.

Avoidance of pollution especially in Tung Chung River-cum-Bay

11. Green Power and the Eco-Education & Resources Centre conducted survey in Tung Chung Bay in 2012 and found that Tung Chung Bay is of high ecological importance for pipefish. Also, larvae of economical species, including those of families Callionymidae, Clupeidae, Engraulidae, Gobiidae, Sciaenidae, Sillaginidae, Lutjanidae, were found. The Administration's ecological and fisheries survey findings also confirm that Tung Chung Bay is an important spawning and nursery ground for sea horses and other marine life, and a rich fisheries resources site. We are highly concerned about the impacts of the construction works to the water quality and ecology of Tung Chung Bay, given the proximity of the construction sites to the sensitive ecosystem.
12. In order to avoid alteration of physical setting, damage to ecology and deterioration of water quality of natural streams in the area, all stream courses and water channels, their tributaries as well as small streams with unclear sources (such as that flowing into the Wong Lung Hang mangroves), and their riparia should be avoided from any construction sites (see para. 11 and Appendix 1), diversion, excavation, shotcreting, paving of beds and banks, stockpiling, and any sewage and effluent discharge during both construction and operational phases.
13. We urge that no sewage and effluent shall be directly discharged from any construction sites (including those listed in para. 11) into Wong Lung Hang stream and Tung Chung Bay.
14. Monitoring of water quality in water bodies nearby the construction sites during the construction phase is an essential control measure. As the existing statutory water quality objectives (WQO) have not been proven to be suitable for the survival and reproduction of aquatic life, ecological-based standards of water quality should be derived for the preservation of aquatic ecosystem of Tung Chung River-cum-Bay.
15. Strict compliance and enforcement of such measures are of particular importance, especially when discharge of wastewater or other pollutants from construction sites into ecologically sensitive areas are very difficult to rectify, and that dumping or stockpiling of such pollutants (e.g. C&D materials) offsite are usually difficult to monitor (see section below).

Avoidance of landfilling

16. The proposed Tung Chung West Station would create opportunity for vandalism such as landfilling through construction works. This is of particular concern as the Project Profile proposed to construct the underground station and tunnel portal by cut-and cover method which generates large amount of fill materials that need to be disposed of.
17. Although the C&D materials generated during site-clearance and site formation are proposed to be reused on site as far as practicable, there is still high possibility that such materials are dumped or stored at ecologically important areas near to project site. This is particularly possible for sites on Lantau because of the long transport distance to waste facilities such as landfills, and the charging for vehicles travelling through North Lantau Highway.
18. Although the eastern part of Tung Chung Valley and Wong Lung Hang areas are covered in the TCTCOZP, these areas have never been covered by any Development Permission Area (DPA) Plans, and thus any incompatible developments or environmental vandalisms, such as filling of land/pond or excavation of land, cannot be controlled or enforced under the legal framework.
19. Even for areas formerly covered in DPA plans (e.g. Tung Chung Valley), the plans are still not effective for banning illegal dumping and landfilling because:
 - (a) the scale of dumping or landfilling (e.g. piling of soil on river banks) may not be considered as a development in view of the interpretation of Town Planning Ordinance;
 - (b) the nature of dumped or landfilled materials may not be considered as breach of land use of zoning in DPA plan, for example, filling of topsoil in a wetland which is formerly a wet agricultural land;

- (c) even remediation is implemented after vandalism, the offender may not need to reinstate the site back to the original physical setting;
- (d) remediation of damaged habitats cannot guarantee the reinstatement of substratum, vegetation, hydrology, water quality, flora and fauna, etc.

Prevention of such activities in addition to strong enforcement of the planning regulations is thus essential to the protection of the vulnerable areas around Tung Chung River-cum-Bay.

- 20. Regarding Section 5.5.1 of the Project Profile, proper implementation of trip-ticket system should effectively avoid illegal dumping and landfilling of C&D materials at unauthorized sites. However, there have been many cases of cheating of the system. Stringent documentation, verification and monitoring for the waste disposal system must be implemented to avoid landfilling of ecologically sensitive areas.
- 21. In order to protect the ecosystem and natural environment of Tung Chung River-cum-Bay and South Lantau from air pollution and illegal dumping, large vehicles, construction / dump trucks and similar machineries must be prohibited from entering the section of Tung Chung Road between Ha Ling Pei and Shek Mun Kap, and all sections of South Lantau Road, as well as Chung Mun Road (Appendix 1). Vehicles that have justified reasons for entering need to seek formal approval from relevant authorities and be closely monitored.
- 22. The relevant authorities must confirm a Construction & Demolition Material Management Plan (C&DMMP) that constitutes workable measures, including mandatory collection of C&D waste and provision of transportation to ensure no C&D materials are dumped or stored in ecologically-sensitive areas identified by all EIA Reports, including but not limited to SSSI, CPA, CA, GB, the proposed River Park, SUDS and Country Parks, and transferred to designated facilities. A barging point for compulsory delivery of waste by well-controlled barges should be established with careful consideration of the transportation route between the construction sites and the barging point.
- 23. Activities of all large vehicles, construction / dump trucks, barges and similar machineries related to the Project on Lantau should be closely monitored using GPS devices.

Prohibition of use of any lands in Tung Chung West in this project

- 24. Filling of the river banks and wetlands with wastes and/or soil debris are continually reported in areas around Tung Chung West. Given the proximity of the proposed railway structures to, and high accessibility from the existing road networks of the ecologically sensitive areas, there is high chance that such activities would spread to and proliferate in these areas, including mangroves in CPA zones, riparian areas in CA zones or even those within the future River Park area, thereby destroying the natural habitats within Tung Chung River Valley.
- 25. Given the high ecological sensitivity of Tung Chung River Basin (Tung Chung West) and no actual need of the Project to encroach into Tung Chung West, no lands in Tung Chung West shall be used in any way related to the Project (refer to para 10 and 21).

Conclusion

- 26. Currently, preservation of the Tung Chung River-cum-Bay system, is processed as a mitigation measure rather than a “conservation-orientated” objective which only aims to gain granting of Environmental Permits under EIAO. Comprehensive and proactive conservation plan is not the proponent’s priority.
- 27. Under such institutional and statutory arrangement, long-term conservation for Tung Chung River-cum-Bay system can only be guaranteed with rigorous and thorough environmental impact assessments, as well as stringent clauses listed in Environmental Permits to protect the fishery resources, water quality, important species and their habitats in Tung Chung Bay including those in Wong Lung Hang estuary.

28. We hereby reiterate our requests for:

- (a) adoption of alignment which avoids ecologically sensitive areas, conduct comprehensive assessments on the environmental and hydrological impacts to Tung Chung River-cum-Bay area generated by any proposed alignments, and consider construction methods other than cut-and-cover for the proposed railway;
- (b) prohibition of usage of any ecologically important areas and their vicinity (including Areas 38A, 38B, all CPAs, CAs, freshwater bodies, secondary woodlands and areas with important species recorded in any ecological studies) within TCVOZP as sites for station-associated structures or as construction sites;
- (c) avoidance of all stream courses and water channels, their tributaries and small streams with unclear sources (such as that flowing into the Wong Lung Hang mangroves), and their riparia from any construction sites, diversion, excavation, shotcreting, paving of beds and banks, stockpiling;
- (d) strict prohibition of direct discharge of sewage or effluent from construction sites into any water bodies including Wong Lung Hang stream and Tung Chung Bay during both construction and operational phases;
- (e) formulation and adoption of ecological-based statutory water quality standards for preservation of aquatic ecosystem of Tung Chung River, Estuary and Bay;
- (f) prohibition of large vehicles, construction / dump trucks and similar machineries from entering the section of Tung Chung Road between Ha Ling Pei and Shek Mun Kap, and all sections of South Lantau Road, as well as Chung Mun Road;
- (g) mandatory collection of C&D waste and provision of transportation to designated facilities to ensure no C&D materials are dumped or stored in ecologically-sensitive areas;
- (h) close monitoring (using GPS devices) of activities on Lantau of all large vehicles, construction / dump trucks, barges and similar machineries related to the Project.
- (i) Strict prohibition of encroachment into Tung Chung West by any means related to the Project.

Thank you very much for your kind attention. I look forward to your favorable decision to protect Tung Chung River-cum-Bay.

Yours sincerely,



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On behalf of

Eco-Education & Resources Centre

Friends of the Earth

Green Power

Hong Kong Bird Watching Society

The Conservancy Association

Appendix 1. Locations of proposed areas of avoidance (including all areas covered by TCVOZP, freshwater bodies, their riparia and specific areas listed in the main text) and restricted road sections of the Tung Chung Line Extension Project.

