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ACE Paper 25/2008
For advice

Report on the 105th Environmental Impact Assessment Subcommittee Meeting

INTRODUCTION

On 18 September 2008, the Environmental Impact Assessment (EIA) Subcommittee considered the following EIA reports –

(a) Proposed Development at Fung Lok Wai, Yuen Long at Lot 1457 R.P. in D.D. 123 (submitted by the Mutual Luck Investment Ltd.); and

(b) Harbour Area Treatment Scheme (HATS) Stage 2A – Investigation (submitted by the Drainage Services Department).

ADVICE SOUGHT

2. Members are requested to note the views of the Subcommittee and advise whether the EIA reports should be endorsed.

VIEWS OF THE SUBCOMMITTEE

Proposed Development at Fung Lok Wai, Yuen Long at Lot 1457 R.P. in D.D. 123

(ACE-EIA Paper 6/2008)

Need for the Project

3. The purpose of the project is to develop a residential development and a

Wetland Nature Reserve (WNR) at Fung Lok Wai, Yuen Long.

Description of the Project

4. The project area, located to the south of the Inner Deep Bay between Yuen Long Industrial Estate and Hong Kong Wetland Park, is now mainly fish ponds. It covers an area of about 80 ha. The northern half of the project area lies within the boundary of the Mai Po Inner Deep Bay Ramsar Site while the whole site falls within the Deep Bay Buffer Zones. To meet an objection lodged against a gazetted Outline Zoning Plan, the Town Planning Board decided in March 2000 to amend the Outline Zoning Plan and rezone the project area from "Conservation Area" to "Other Specified Uses (Comprehensive Development and Wetland Enhancement Area)". The project comprises a residential development of about 2,860 units taking up about 4 ha (5%) of the project area, a Wetland Nature Reserve (WNR) of about 76 ha (95%) to be developed in the rest of the project area and an access road via the existing Fuk Shun Street to be upgraded through improvement works. The location of the project area is shown in **Figure 1.**

5. The project is classified as a designated project under Item P1, Schedule 2 of the EIA Ordinance: "A residential or recreational development, other than New Territories exempted houses within Deep Bay Buffer Zone 1 or 2".

Members' views

6. Members noted that the public inspection period of the EIA report was from 8 August to 6 September 2008. Public comments received by the Environmental Protection Department (EPD) were circulated to Members for reference before the meeting. The response of the project proponent to some Members' questions and comments was circulated to Members for information before the meeting.

7. Members noted that a letter from the World Wide Fund for Nature Hong Kong (WWF), the conservation partner of the project, was tabled for Members' information. WWF explained their involvement in the project and reasons for supporting the project. WWF highlighted that their interest in the project was purely conservation with no financial benefit involved.

8. A summary of the issues discussed by Members is at **Annex A**. After the meeting, a Member registered his disagreement to the EIA report in view of the

concerns about the cumulative impacts of the current and future developments in the area on the birds, potential risk of outbreak of bird flu on nearby residents, visual impact and public access to the WNR.

RECOMMENDATION OF THE SUBCOMMITTEE

9. Having regard to the findings and recommendations of the EIA report and information provided by the project proponent, Members agreed to recommend to the full Council that the EIA report could be endorsed with the following conditions –

(a) the project proponent should be responsible for the construction of the WNR as part of the development and should provide an undertaking to take sole responsibility for the management of the WNR until a successor could be found to the satisfaction of the EPD. The project proponent should consult the Advisory Council on the Environment (ACE) during the identification of the successor;

(b) prior to the construction of the WNR, the project proponent should set up an independent Environmental Monitoring Committee to supervise the implementation and monitor the effectiveness of the proposed mitigation measures of the project, in a proactive manner, according to the Habitat Creation and Management Plan (HCMP), the EIA report and the Environmental Monitoring and Audit (EM&A) Manual. The composition of the Committee and its terms of reference should be submitted to the ACE for endorsement. In addition, the Environmental Monitoring Committee should review all submissions under the EM&A Manual before these submissions are submitted to the EPD;

(c) the project proponent should submit the final HCMP for the WNR (which should include a plan on the financial arrangement for the proper long-term operation of the WNR for information) to the ACE, EPD and the Agriculture, Fisheries and Conservation Department (AFCD) for endorsement before the construction of the WNR;

(d) the WNR should not be used for any other purpose except for those specified in the HCMP;

(e) the project proponent should put in place a five-yearly review

programme for the HCMP, and the review reports should be submitted to the ACE, EPD and AFCD for endorsement;

(f) the project proponent should submit reports of the environmental monitoring and audit results during the construction phase to the EIA Subcommittee of the ACE on a half-yearly basis and those reports during the operational phase on an annual basis until the end of the third year after full operation. The need for future submissions would be subject to review; and

(g) the project proponent should submit a proposal on environmental-friendly management of the residential portion of the development to the EPD and AFCD to ensure that, among other things, chemicals and pesticides to be used (if necessary) in the residential portion of the development would not have any unacceptable environmental impact on the WNR. The submission should be made before the residential portion is occupied.

10. The Subcommittee also recommended that the EPD should follow up with the project proponent to provide an undertaking to ensure that the parent companies (Cheung Kong (Holdings) Ltd., Sun Hung Kai & Co. Ltd. and Far East Consortium International Ltd.) of the project proponent would take up the responsibility mentioned in paragraph 9(a) above if the project proponent failed to do so.

Harbour Area Treatment Scheme (HATS) Stage 2A - Investigation

(ACE-EIA Paper 7/2008)

Need for the Project

11. In Stage 1 of the Harbour Area Treatment Scheme (HATS) commissioned in 2001, sewage from Tsuen Wan, Kwai Tsing, Tseung Kwan O, the urban areas of Kowloon and northeastern Hong Kong Island is collected and treated at the existing Stonecutters Island Sewage Treatment Works (SCISTW). Since the implementation of HATS Stage 1, the water quality in the Victoria Harbour has improved. However, the remaining sewage (around 450,000 m^3/d) generated by a population of about one million people living on the northern and western shores of Hong Kong Island still receives only rudimentary treatment before discharging into the Victoria Harbour, posing a significant negative impact on water quality. Under

the project, sewage would be collected from eight upgraded preliminary treatment works (PTWs) on the northern and western parts of Hong Kong Island, and conveyed through a deep sewage tunnel to the expanded SCISTW for centralized treatment as indicated in **Figure 2**. The objective is to restore the Victoria Harbour to a healthier condition and prevent further degradation of water quality due to the anticipated increase in population and economic activities.

Description of the project

12. The key elements of the project include upgrading of eight existing PTWs, construction of Sewage Conveyance System for conveying sewage from the eight upgraded PTWs to the SCISTW and expanding the treatment capacity of the existing SCISTW from 1.7M m^3/d to 2.45M m^3/d including expansion of the interim disinfection facilities and other ancillary facilities.

13. The project is classified as a designated project under Item F.1 Part I Schedule 2, Item F.3(b)(i) Part I Schedule 2 and Item F.5 Part I Schedule 2 of the EIA Ordinance.

Members' views

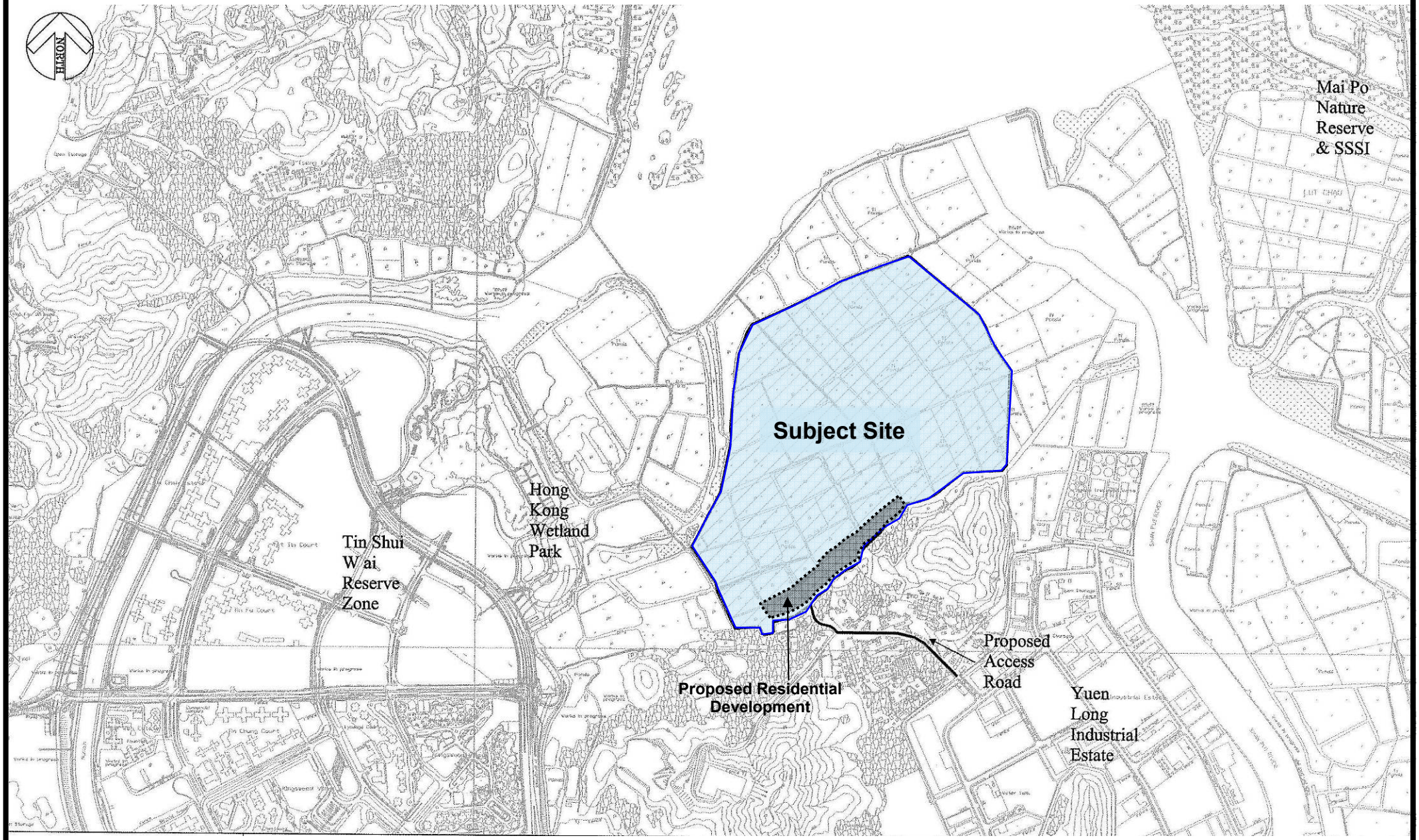
14. Members noted that the public inspection period of the EIA report was from 12 August to 10 September 2008. Public comments received by the EPD were circulated to Members for reference before the meeting. The response of the project proponent to some Members' questions and comments was circulated to Members for information before the meeting.

15. A summary of the issues discussed by Members is at **Annex B**.

RECOMMENDATION OF THE SUBCOMMITTEE

16. Having regard to the findings and recommendations of the EIA report and information provided by the project proponent, Members agreed to recommend to the full Council that the EIA report could be endorsed without condition.

EIA Subcommittee Secretariat
September 2008



Project Title – EIA for Proposed Development at Fung Lok Wai, Yuen Long at Lot 1457 R.P. in D.D. 123

Figure 1 - Project Location (Reproduced from Figure 2-1 of the EIA Report)

Annex A

EIA report on Proposed Development at Fung Lok Wai, Yuen Long
A Summary of Issues Discussed by the EIA Subcommittee
at the EIA Subcommittee Meeting on 18 September 2008

The Environmental Impact Assessment (EIA) Subcommittee discussed the EIA report on "Proposed Development at Fung Lok Wai, Yuen Long at Lot 1457 R.P. in D.D. 123" at its meeting on 18 September 2008. The issues discussed are summarized below.

Compatibility of the wetland nature reserve and residential development

2. On the compatibility issue of having a residential development next to a wetland nature reserve (WNR) area, the project proponent team explained that the issue of compatibility was considered in detail throughout the planning process. The residential development was compatible with the environment in achieving both objectives of nature conservation and development. As fish ponds required active management in order to maintain their ecological value, the project comprising the nature reserve and a management regime would improve and enhance the site condition of the abandoned and deteriorating fish ponds and ensure their sustainability. Impacts of the development on wildlife and birds were fully addressed with appropriate mitigation measures. From the perspective of visual impacts, the proposed development would integrate well with the natural and aquacultural landscape with mitigation measures to enhance visual integration of the development, including stepped building profiles, visual corridors, green measures on building facades and extensive buffer areas. Detailed discussions had been conducted with the Planning Department to ensure that the development would blend in well with the existing landscape.

3. On the issue of zoning requirement, the project proponent team confirmed that the proposed development complied with the zoning requirements of the area which was zoned as "Other Specified Uses (Comprehensive Development and Wetland Enhancement Area)". It allowed limited low-density private residential/passive recreational development in exchange for committed long-term conservation and management of the remaining fish ponds or wetland within the development site. The "no-net-loss in wetland" principle under the Town Planning Board guidelines was a key development criterion for the project.

Options of development forms

4. On the options of development forms, the project proponent team explained that during the selection process of the preferred option, three schemes (1A, 1B and 1C) of development forms were explored. Both options 1A and 1B had a footprint of about 4 ha but with different building height profiles. Under option 1A, eight blocks of 14-18 storeys and seven groups of buildings of 4-8 storeys would be built. Under option 1B, nine blocks of 15 storeys and seven groups of buildings of 4-10 storeys would be built. These two options complied with the "no-net-loss in wetland" principle. For option 1C, the footprint was more extensive requiring about 6 ha as the building height was lower, including 29 blocks of 7-10 storeys and 27 4-storey terrace houses. This option was not acceptable as it could not comply with the "no-net-loss in wetland" principle. From the perspective of visual impacts, the more extensive building blocks under option 1C would disturb the green backdrop to a greater extent and the development parameters would impose limitations on the application of more innovative architectural design features.

5. On the assessment of impacts of different building profiles on the birds, the project proponent team explained that survey findings revealed that a vast majority of bird movements were at a relatively low altitude. Increasing the height of the buildings would not make a big difference on the impacts on the birds. Thus, it was better to have fewer buildings which were slightly taller (as in the case of options 1A and 1B) than having more buildings which were slightly lower (as in the case of option 1C). Under options 1A and 1B, more space in between buildings would maintain a better sightline and views of the habitat for the birds. Under this principle, there was a slight preference for option 1A over 1B.

Landscape and visual impacts

6. On the contrast of the relatively high building blocks as compared with the low-rise village houses in vicinity, the project proponent team explained that the two hills located to the south of the building development would form a backdrop for the buildings. Moreover, the building blocks in Tin Shui Wai near the site were also key features of the landscape.

7. On the design of sky gardens under option 1A, the project proponent team explained that the design was intended to punctuate the visual mass of the development by having a visually permeable feature to maximize the views and produce the effect of softened sightline on the natural landscape.

8. The project proponent team noted Members' suggestion of adopting aesthetic building design to each building in order to blend the buildings into the natural landscape, such as the use of visual corridors, voids in the facades and variation of design features (such as by means of visual greening and re-orientation of stepped building heights). The uniform building design in Tin Shui Wai should be avoided. The team indicated that while the detailed design of the buildings was not yet finalized, they assured Members that the building design would be aesthetically pleasing.

Tree felling impacts

9. On some Members' concern about the large number of trees to be felled, the project proponent team explained that the principle of the tree felling proposal was to preserve as many trees as possible, in particular those in the WNR. Out of the 665 trees in the site, 178 were banana trees and majority of the rest were recently planted fruit trees. The EIA recommended that about 238 trees (36%) would be retained in-situ and about 28 (4%) would be transplanted. After the felling of 399 trees (60%), over 1,000 new trees would be re-planted at a compensatory ratio of 2.6 to 1. Native tree species would be re-planted as far as possible to facilitate integration of the trees to the existing landscape. There was no valuable old tree or "Fung Shui" tree within the site.

10. On the monitoring of contractors, the project proponent team confirmed that the contractors would be closely monitored to avoid damage to the retained and transplanted trees. Access to protected tree areas would be restricted. Contractors would be required to employ site staff with knowledge in horticulture or arboriculture.

11. On the tree compensatory ratio, Agriculture, Fisheries and Conservation Department (AFCD) advised that there was no fixed tree compensatory ratio and it would depend on the circumstances of individual project. For the current project, the compensatory ratio of 2.6 to 1 was appropriate, having regard that a green belt of native woodland would be created and majority of the trees affected were banana trees.

Management of the Wetland Nature Reserve

12. On the independent monitoring mechanism for management of the

WNR, the project proponent team explained that an Environmental Committee would be set up to oversee the management of the WNR. The function and membership of the Environmental Committee would be in line with those of the Lok Ma Chau Spur Line project. The World Wide Fund for Nature Hong Kong (WWF) would manage the WNR and report progress to the Environmental Committee. Within WWF, the project would be separately accounted for. The progress of the project would be reported to the Scientific Advisory Committee which comprised academics and experts. The WWF hoped that the project would be a model for integrating development with nature conservation. After WWF handed over the management responsibility of the WNR to an independent non-profit making Foundation, representatives of WWF would join the Environmental Committee to continue the monitoring and advisory role. Separately, a Trust Management Board would be set up to monitor the funding matters of the Foundation.

13. Members noted that the role of the Environmental Committee, as in the case of the Lok Ma Chau Spur Line project, was relatively passive. The Committee mainly received reports to ensure that the environmental standards could be met. Members considered that an independent Environmental Monitoring Committee with membership from the public and relevant stakeholders should be set up to supervise and monitor the day-to-day implementation and management of the WNR in a proactive manner.

14. On the long-term financial commitments for the WNR, the Environmental Protection Department (EPD) advised that the project proponent should be responsible for the creation, enhancement and management of the WNR until a successor could be identified to the satisfaction of the EPD. The project proponent would be fully responsible for providing financial support to the long-term management of the WNR so as to meet the standards stated in the EIA report. Noting Members' concern about the status of Mutual Luck Investment Limited, the project proponent team confirmed that until a successor was identified as afore-mentioned, the parent companies (Cheung Kong (Holdings) Ltd., Sun Hung Kai & Co. Ltd. and Far East Consortium International Ltd.) would undertake to provide long-term back-up of the financial responsibility for the WNR. The EPD would follow up with them in this aspect.

15. Some Members noted that the project proponent would provide an annual operating fund of $3,950,298 for the WNR, the project proponent team explained that they would inject an adequate amount of seed money into the future Foundation. It would be calculated on the basis of the annual operating budget of the

WNR. The annual operation cost, at present value, was $3,950,298 as advised by the WWF.

16. On the Habitat Creation and Management Plan, AFCD advised that they would examine the plan, monitor the progress of the project during the construction and operational phases and provide assistance where necessary.

17. On the access to the WNR, the project proponent team explained that the current thinking was that access would be on a restricted basis for preservation of the WNR in a sustainable manner. The WNR would be opened to the public in a controlled manner while the residents of the proposed residential development would not have privilege of access. The WNR would be mainly for access to research and to conservation education purposes but the details had yet to be worked out and the final decision on the detailed arrangements would be up to the management of the WNR. Some Members expressed concern about the control of access to the WNR which should be a good place for public environmental education.

18. Some Members were concerned that residents might be given privilege to access the WNR which would be inconsistent with the objective of promoting conservation education. Public access to the WNR should be allowed on a restrictive basis for education purpose. AFCD clarified that as stipulated in paragraph 15.3.2 of the EIA report, residents in the residential development would neither have privilege over the general public for access to the WNR nor the liability of its maintenance. EPD advised that as stipulated in paragraph 2.7.2 of the Executive Summary, whilst conservation was the prime objective of the WNR, limited public access would be allowed on a restricted basis so as not to create disturbance to birds. Occasional guided tours and some educational facilities could be contemplated. Picnicking and similar activities would not be allowed within the WNR. Members noted that under the Ramsar Convention, the land use should be in line with the principle of "wise use of wetlands" in that maintenance and operation of fish ponds in an ecologically sustainable manner should be encouraged.

19. On the proposed education and resource centre, the project proponent team explained that the facility was not meant to be a large-scale visitor center for the general public. It was basically a small structure with management office and reception counter to receive small groups of visitors.

20. Some Members noted that Leopard Cat was not included in the mammal list of the EIA report and White-throated Kingfisher, Pied Kingfisher,

Red-billed Starling were not chosen as target species for the design of the WNR. The project proponent team explained that the most important consideration was to choose the appropriate habitat and species which were most sensitive and abundant. If the habitat was suitable for these species, it would be suitable for the less sensitive ones. The targets would be revisited prior to the commencement of construction. A more focused list reflecting key indicator species of wetland habitat quality would be developed in consultation with the Environmental Committee.

Management of the residential development

21. On the means to avoid possible conflicts between the management of the WNR and that of the residential development which would be independent from each other, the project proponent team explained that there were merits for the management of the WNR to be independent from that of the residential development. To avoid possible conflicts, the setting of environmental-friendly management principles for the residential development would be useful. Residents who would choose to live near a WNR should respect these principles in caring for the nature.

22. On some Members' concern about the use of pesticides and insecticides in the residential development, the project proponent team explained that mechanical measures rather than chemical means for managing the soft landscape (trees, shrubs and lawn) area would be used as far as possible. With the appropriate choice of plant species, improvement of landscape design and adoption of intensive management techniques, the use of chemicals for landscape enhancement would be minimized. Requirements of using organic-based or biodegradable chemicals could be included in contractual agreements to ensure that the ecological principle of the project would be upheld.

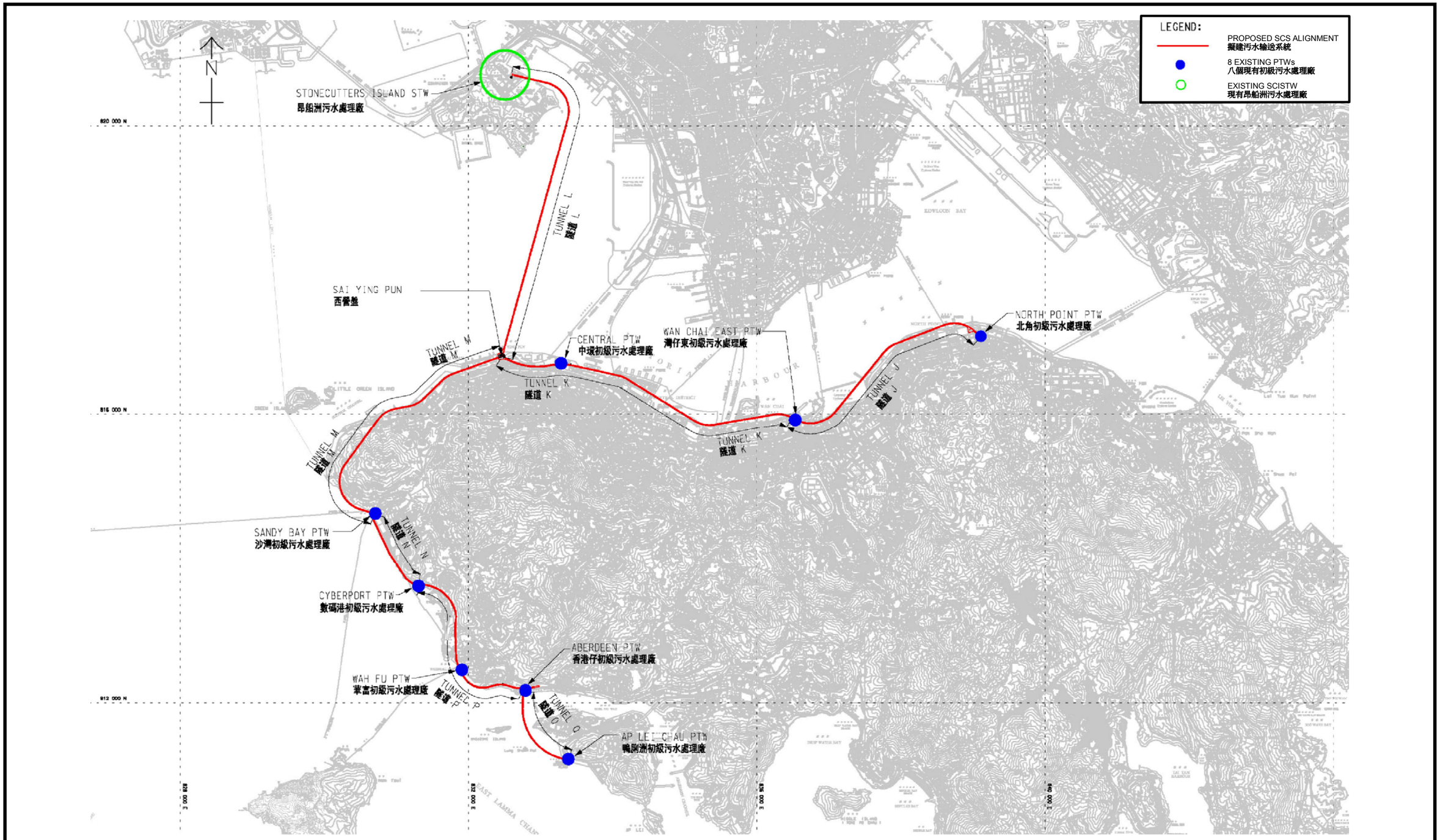
23. On some Members' concern about runoff of contaminated water from the residential development to the wetland area, the project proponent team explained that the residential runoff only formed a small part of the water catchment in the wetland, which would be part of the water source for the freshwater marsh. The water source for the fish pond area was maintained by a separate hydrological system. For the runoff from the residential area, grease and chemicals, if any, would be filtered by traps and the water would be retained in the storage ponds for some time which allowed natural breaking down of organic-based or biodegradable chemicals, if any. Members agreed that chemicals and pesticides to be used, if necessary, should not have any unacceptable environmental impact on the WNR. This should be one of the key principles under the environmental-friendly management approach of the

residential development.

24. On measures to tackle the possible outbreak of Avian Flu having regard that a residential development was located in close vicinity to a WNR, the project proponent team explained that the WWF would institute a three-tier system of precautionary measures in cooperation with the Department of Health and AFCD. Information would be disseminated to residents about the latest development and the importance of personal hygiene. AFCD advised that the Fung Lok Wai WNR was different from the Mai Po Nature Reserve which had a high concentration of birds and visitors were attracted for bird watching there. Closure of the Mai Po Nature Reserve due to the occurrence of Avian Flu was necessary on public health safety grounds. For the WNR, the key objective was to conserve the natural environment for the birds' usage rather than attracting visitors. It was envisaged that the issue of Avian Flu would not be a great problem for the management of the WNR and residential development.

Traffic impact assessment

25. On the traffic impact assessment (TIA), the project proponent team explained that the Study Brief for the EIA study did not require the submission of TIA report and thus it was not included in the EIA report. However, the effects of the increase in traffic regarding noise and air were assessed and included in the EIA. The TIA was conducted in 2003 and the report, including the proposal of upgrading the access road on government land, was submitted to the Transport Department. On possible environmental impacts of the road works and increased traffic, the anticipated increase of traffic flow was only about 300 vehicles per hour. The air quality and noise impact assessments in both the construction and operational phases in the EIA study were based on the results of the TIA. The assessment concluded that the impacts were acceptable. Upon Members' request, the project proponent provided the TIA report for Members' information after the meeting.



Project Title: Harbour Area Treatment Scheme (HATS) Stage 2A

Figure 2 General Layout Plan (Reproduced from Figure 1 of the Executive Summary of the EIA Report)

Annex B

EIA report on Harbour Area Treatment Scheme Stage 2A – Investigation
A Summary of Issues Discussed by the EIA Subcommittee
at the EIA Subcommittee Meeting on 18 September 2008

The Environmental Impact Assessment (EIA) Subcommittee discussed the EIA report on "Harbour Area Treatment Scheme (HATS) Stage 2A - Investigation" at its meeting on 18 September 2008. The issues discussed are summarized below.

Interface with other projects

2. On the interface problem and potential cumulative impacts arising from the project of "Container Terminal 10 Development at Southwest Tsing Yi" (CT10 project), the project proponent team explained that the site and the timing of the CT10 project was not available when the EIA report of HATS Stage 2A was compiled and hence it was not possible for the current EIA study to assess the cumulative impacts of the concurrent operation of the two projects. It should be noted that the Study Brief of the CT10 project required the project proponent to assess the impacts, including detailed hydrodynamic and water quality impacts, with particular attention to the hydrodynamics, dispersion and dilution effects on the sewage effluent discharged from the HATS outfall at Stonecutters Island.

3. On the significance of hydrodynamic impact of the CT10 project, the project proponent team explained that the CT10 project might involve reclamation works resulting in changes in the coastline. The project proponent of the CT10 project would have to conduct detailed water quality modelings. It was envisaged that the impacts of the reclamation works on the water quality would not be very significant. The CT10 would be at the southwest of Tsing Yi while the existing Stonecutters Island Sewage Treatment Works (SCISTW) outfall area was in the middle of the faster current of the Victoria Harbour. It was envisaged that the reclamation would not reach out to the channel bringing significant hydrodynamic impact. However, it would still depend on the final layout of the CT10. Comprehensive assessment would have to be conducted when detailed design of the CT10 was available. The Environmental Protection Department (EPD) confirmed that the Study Brief of the CT10 project was issued in August 2008 and the Study Brief required the project proponent to address all the cumulative impacts of planned projects in the vicinity, including HATS Stage 2A.

Water quality impacts

4. On the concern about the water quality at the outfall area of the SCISTW after implementation of the HATS Stage 2A project, the project proponent team explained that 75% of sewage generated around Victoria Harbour was collected and treated under HATS Stage 1. With the implementation of HATS Stage 2A, the remaining 25% of sewage would be collected and treated at the enhanced SCISTW and discharged to the existing outfall area. The enhanced treatment facilities would remove about 40% of organic nitrogen, 40% to 50% of ortho-phosphate (PO_4), 70% of biological oxygen demand (BOD), 80% of suspended solids and 99.9% of the *E. coli*. It was predicted that the size of the mixing zone near the existing outfall area of the SCISTW would be smaller with the implementation of HATS Stage 2A due to the reduction in pollution loading in the background by intercepting the raw sewage from Hong Kong Island and better dilution capacity at the outfall location. There would be an overall improvement of water quality due to the implementation of the project. The exceedance of total inorganic nitrogen was mainly caused by the high level of pollution loading of the discharge from the Pearl River Delta. The exceedances of unionized ammonia and PO_4 were found to be localized and would not impair the integrity of the water body.

Odour problem

5. On measures to minimize the odour problem, the project proponent team explained that under HATS Stage 1, a number of odour emission sources had already been covered, enclosed and deodourized. The provision of similar mitigation measures would be extended to HATS Stage 2A. However, the sedimentation tanks which were not covered at the moment had been identified as one of the odour emission sources that required further mitigation measures to ensure that the air sensitive receivers would not be affected. As there was increasing number of sensitive receivers around the facility, all of the sedimentation tanks would need to be covered and provided with adequate ventilation and deodourization facilities. A two-stage deodorization system with 97% odour removal efficiency would be installed in the SCISTW to meet the odour criterion stipulated in the Technical Memorandum on Environmental Impact Assessment Process at the identified air sensitive receivers. For the HATS Stage 2B project, a separate EIA study would be conducted when the project went ahead. The odour problem and appropriate mitigation measures would be studied in detail. HATS Stage 2B would further upgrade the sewage treatment level by the addition of a biological treatment plant on a site adjacent to the SCISTW. The odour treatment facilities under HATS Stage 2A

would not jeopardize those to be provided under HATS Stage 2B. EPD advised that a study on the co-use of the land under HATS Stage 2B had commenced in May 2008, including the possibility of building an underground biological treatment plant with other container and port related facilities on the deck cover.

Landscape and visual impacts

6. On the possibility of minimizing the visual impacts of the structures of Preliminary Treatment Works (PTWs), the project proponent team explained that the PTWs were relatively low-rise structures when compared with the surroundings. To enhance landscape quality and reduce adverse visual impacts, roof greening and vertical greening would be adopted where possible. As an example, a green roof had already been provided at Wan Chai East PTW. Appropriate greening and landscape improvement measures would continue to be adopted in other PTWs where possible and relevant parties in the district would be consulted.

Contingency plans

7. On the availability of contingency plans, such as in the case of power failure, the project proponent team indicated that a modular design was used for SCISTW with parallel streams of facilities, dual power supply and standby pumps, treatment units and equipment. Standby unit(s) and dual or backup power supply would also be provided at all PTWs under this project. Since commissioning of the HATS Stage 1 in 2001, there had not been any major problem of power supply to the SCISTW and PTWs. The operation had been non-stop since its commissioning and had provided satisfactory treatment results.

Planned centralized sludge treatment facility

8. On the planned centralized sludge treatment facility, the project proponent team indicated that the facility could handle at least 1,500 tonnes of sludge from SCISTW per day in the first phase. The project was at its planning stage and its commissioning would match with that of HATS Stage 2A project. The sludge generated from the HATS Stage 2A project would be delivered to the new facility for treatment without the need to be disposed of at the landfills.