40/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong
香港灣仔告士打道 5 號稅務大樓 40 樓

ACE Paper 24/2008
For advice

Report on the 104th Environmental Impact Assessment Subcommittee Meeting

INTRODUCTION

On 8 September 2008, the Environmental Impact Assessment (EIA) Subcommittee considered the Environmental Assessment (EA) report on "Pilot Project for Public-private Partnership Conservation Scheme, Sha Lo Tung Valley, Tai Po" submitted by the Sha Lo Tung Development Company Ltd. (ACE-EIA Paper 5/2008 at **Annex A**).

ADVICE SOUGHT

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

VIEWS OF THE SUBCOMMITTEE

3. Members noted that the Sha Lo Tung (SLT) project was one of the proposals submitted under the Pilot Scheme for Public-private Partnership (PPP) under the New Nature Conservation Policy. At the meeting of the Advisory Council on the Environment (ACE) on 14 April 2008, the Council discussed the report of the Nature Conservation Subcommittee regarding the proposals submitted under the PPP Scheme. The Council concluded that the SLT proposal should be supported from the nature conservation angle. However, some implementation issues would need to be addressed as the proposal was to be taken forward. In the absence of statutory Environmental Impact Assessment Ordinance (EIAO) procedures, the project

proponent should be advised to make public its environmental impact assessment study and to submit it to the EIA Subcommittee for advice. Robust and legally binding measures should be formulated to ensure the continuing compliance of any pledged measures on environmental and nature conservation by the proponent.

4. Members noted that while the project was not a designated project under the EIAO, the project proponent agreed to go through the same public inspection and consultation process using the same standards and criteria under the EIAO, including seeking advice from the ACE. Nonetheless, no Environmental Permit would be issued by the Environmental Protection Department (EPD).

5. Members noted that the public inspection period of the EA report was from 5 August to 3 September 2008. 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.

6. A summary of issues discussed by the Subcommittee on the EA report is at **Annex B**.

ADDITIONAL INFORMATION FROM PROJECT PROPONENT

7. The Subcommittee considered that the project proponent should be required to provide supplementary information on the following aspects in light of Members' concerns –

(1) Regarding the SLT Stream which is located to the north of the proposed development site (Fig 5.3 of the EA report refers), Members were concerned about the impacts arising from the loss of catchment area on the streamflow and aquatic ecology caused by the development. Information is required on –

(a) the estimated extent of reduction in the flow of the local tributary caused by the development on the localized catchment area (i.e. catchment area at and near the development site and not the whole catchment area of the SLT Valley), in particular in dry seasons; and

(b) assessment conducted on the localized potential impacts, including the potential impacts on aquatic organisms in the local tributary of the area.

(2) Regarding the traffic impact assessment, Members were concerned about the possible under-estimation of the number of visitors during the festival days which is used as a basis for calculating the number of niches to be built in the Columbarium. They were also concerned about the carrying capacity at the Columbarium during festival days and possible impacts on the nearby Ecological Reserve. Information is required on –

(a) projection on the number of visitors to the proposed Columbarium on festival days by using 1,220 trip generation (in Table 5-3 of the EA report) as the basis, plus a certain level of buffer;

(b) projection on the potential traffic impact and number of visitors to the proposed Columbarium on festival days by using data from more recently built columbarium developments, given that Ching Chung Sin Yuen, the one referred to in the EA report, is a relatively old columbarium development and visitation is expected not as frequent as that of the recently built columbarium developments;

(c) any further measures on the control of visitors within the Columbarium Complex during festival days; and

(d) any further measures to avoid human disturbance and adverse impacts on the nearby ecologically important areas, in particular during festival days.

(3) The Environmental Monitoring and Audit (EM&A) Manual on the development proposal. Members noted that while a chapter on EM&A requirement was provided in Section 12 of the EA report, a detailed EM&A Manual was not provided together with the EA report.

8. The supplementary information provided by the project proponent (at **Annex C**) was circulated to Members.

RECOMMENDATION OF THE SUBCOMMITTEE

9. Having regard to the findings and recommendations of the EA report and supplementary information provided by the project proponent, the Subcommittee agreed to recommend to the full Council that the EA report could be endorsed with the following conditions. As no Environmental Permit would be issued by the EPD for the project, the conditions should be spelt out in the legally-binding agreement between the project proponent and the Government.

(a) a robust mechanism and legally enforceable measures should be put in place to ensure the full implementation and continuing compliance of recommendations and mitigation measures on environmental and nature conservation committed by the project proponent, including those in the EA report, Conservation Management Plan and EM&A Manual;

(b) the project proponent should ensure that the project is constructed and operated in accordance with the information and recommendations described in the EA report, EM&A Manual and relevant documents;

(c) measures should be taken to ensure the operation of the Multi-cultural Education Retreat cum Columbarium Complex would not have any unacceptable environmental impact on the overall nature conservation principles of the Ecological Reserve, in particular that the Multi-cultural Education Retreat would not be turned to a resort-type facility or any other facilities with a business nature;

(d) the "festival days" with special traffic and visitor management arrangements should also include Saturdays immediately preceding and after the Ching Ming Festival as well as Saturdays immediately preceding and after the Chung Yeung Festival. Regular reviews should be conducted by the Conservation Management Board on the definition of "festival days" and the cap on the number of visitors on "festival days" in light of traffic management and site control in the Columbarium Complex. The special traffic and visitor management arrangements should be set out in the sales and purchase agreement prominently between the project proponent and niche buyers to avoid dispute in future;

(e) during the operation of the Columbarium, burning of effigies and paper offerings should be prohibited in the site, including the Columbarium Complex, Multi-cultural Education Retreat, Nature Interpretation Center and open space. Burning of incense and candles should also be prohibited in the site, except that one incense of a reasonable size could be lit up within the Multi-cultural Education Retreat;

(f) the project proponent should submit reports of the EM&A results on ecological and water quality monitoring during the construction phase to the EIA Subcommittee of the ACE on a quarterly basis and those reports during the operational phase on an annual basis until the end of the first year after full operation of the Columbarium. The project proponent should also submit monitoring reports for the Ecological Reserve to the EIA Subcommittee on an annual basis; and

(g) the project proponent should submit a tree-felling and re-planting plan to the EPD and AFCD for agreement before commencement of the construction works.

EIA Subcommittee Secretariat
September 2008

Annex A

40/F, Revenue Tower, 5 Gloucester Road, Wan Chai, Hong Kong
香港灣仔告士打道 5 號稅務大樓 40 樓

ACE-EIA Paper 5/2008
For advice

Environmental Assessment Report
Pilot Project for Public-private Partnership Conservation Scheme at Sha Lo Tung Valley, Tai Po

PURPOSE

This paper presents the key findings and recommendations of the Environmental Assessment (EA) report for the proposed project at Sha Lo Tung Valley, Tai Po. The project proponent, Sha Lo Tung Development Company (SLTDC) and their consultants will be represented at the EIA Subcommittee meeting on 8 September 2008.

ADVICE SOUGHT

2. Members' views are sought on the findings and recommendations of the EA report.

BACKGROUND AND NEED FOR PROJECT

3. Following a comprehensive review of the nature conservation policy and measures, the Government promulgated the New Nature Conservation Policy (NNCP) in end 2004. The NNCP aims at regulating, protecting and managing natural resources that are important for the conservation of biological diversity of Hong Kong in a sustainable manner, taking into account social and economic considerations, for the benefit and enjoyment of the present and future generations of the community. Under the NNCP, 12 priority sites have been identified for enhanced conservation under a scoring system drawn up by an Expert Group with membership comprising key

academics and major green/interest groups with expertise in ecology.

4. Under the NNCP, the Government proposed to implement the Pilot Scheme for Public-private Partnership (PPP), with a view to striking a balance between sustainable development and nature conservation. Under this scheme, development of an agreed scale will be allowed at the ecologically less sensitive portion of any of the 12 priority sites, provided that the project proponent undertakes to conserve and manage the rest of the site that is ecologically more sensitive on a long-term basis. We received a total of six applications including the Sha Lo Tung project.

5. The Sha Lo Tung project was first discussed by the Nature Conservation Subcommittee of the Advisory Council on the Environment (NCSC) on 9 April 2008 and then by the Advisory Council on the Environment (ACE) on 14 April 2008. The ACE noted the ecological merits of the proposal as the ecologically important Sha Lo Tung Valley would be managed as an Ecological Reserve whereas the proposed development of a Multi-cultural Educational Retreat cum Columbarium Complex would only be carried out in the adjacent Green Belt site which was of less ecological significance. The ACE agreed that the Government should support the Sha Lo Tung project from the nature conservation angle. The NCSC further discussed the proposed conservation management plan for the Ecological Reserve on 14 August 2008 and agreed that the proposed measures could enhance the ecological value of Sha Lo Tung Valley.

6. Though the project is not a designated project under the Environmental Impact Assessment Ordinance (EIAO), SLTDC has completed an EA Report for the project and agreed to go through the same public inspection and consultation process using the same standards and criteria under the EIAO including seeking advice from the ACE.

7. In response to ACE Members' concerns that a robust mechanism and legally enforceable measures have to be put in place to ensure the full implementation of recommendations and mitigating measures identified in the EA Report, the Government is considering appropriate legally-binding instruments such as contractual agreements between the Government and SLTDC.

DESCRIPTION OF THE PROJECT

8. The project includes three components, i.e. (a) Ecological Reserve, (b) Development Site and (c) Sha Lo Tung Road improvement. A brief description is

set out below and their locations are shown in **Figure 1**:

(a) *Ecological Reserve:* SLTDC proposes to surrender all of the land it owns in Sha Lo Tung Valley (about 27 ha, representing 96% of the private land in the valley) to the Government for setting up an Ecological Reserve of approximately 52 ha. In order to enhance the ecological value of the site, SLTDC intends to implement a comprehensive management plan for the Ecological Reserve. Under the plan, there are measures to conserve the dragonfly biodiversity through protecting the important habitats. Moreover, SLTDC has agreed to implement measures to prevent hill fire, remove exotic vegetation, enhance the quality of secondary woodland, conserve target species and habitats, restore abandoned farmland, manage the proposed Nature Interpretation Centre at the Development Site, and to promote conservation education. SLTDC has undertaken to spend $50 million to set up the Ecological Reserve and inject another $120 million into a trust to finance the long-term operation of the Ecological Reserve of which the majority of trustees would be appointed by the Government.

(b) *Development Site:* SLTDC requests a piece of government land of some 5 ha in the adjacent "Green Belt" for the development of a Nature Interpretation Centre, and a Multi-cultural Education Retreat cum Columbarium Complex (with a footprint of approximately 1.5 ha). It will pay for the full market premium to effect the land exchange.

(c) *Sha Lo Tung Road improvement:* The existing Sha Lo Tung Road (approximately 2.3 km) which is the only access road to the Sha Lo Tung Valley will be upgraded by SLTDC at its own cost to the minimum requirement of a safe Single Track Access Road that would enable emergency access for fire engines. In addition, SLTDC will further inject $20 million into a trust to finance the management and maintenance of the road.

CONSIDERATION OF ALTERNATIVE OPTIONS

9. The EA Report has considered alternative layout options for the development site with a view to avoiding and minimizing disturbance and impact on nearby ecological

sensitive areas. The recommended layout as shown in **Figure 2** has the following features in this respect:

(a) no encroachment onto the nearby country park, conservation area and Site of Special Scientific Interest (SSSI);

(b) provision of a 20 m non-building buffer between the development site and the Sha Lo Tung SSSI;

(c) majority of the building works is located at the southern part of the development site and away from the secondary woodland and Sha Lo Tung SSSI; and

(d) no restaurant in the development to reduce human disturbance.

SPECIFIC ENVIRONEMNTAL ASPECTS TO HIGHLIGHT

Water Quality and Ecological Impacts

10. The ecologically important habitats of the Sha Lo Tung Valley are stream and marsh, which are important breeding and development grounds for dragonflies, fresh water fishes and woodland. As the development site is immediately adjacent to the Sha Lo Tung Valley, the construction activities and silty runoff especially during rainy seasons will have the potential to bring about water quality and ecological impacts. The EA Report has recommended the following mitigation measures for the development site:

(a) new stormwater drainage and sewerage systems will be installed along the Sha Lo Tung Road prior to construction works so that silty runoff and sewage generated from construction activities will be collected and diverted away from the Sha Lo Tung Valley;

(b) temporary drains with silt traps will be constructed at the development site boundary for collection of silty runoff;

(c) no excavation works will be carried out in wet season from April to October to minimize generation of silty runoff;

(d) construction works will be carried out in stages starting from the southern part of the site to minimize cumulative impact arising from concurrent works within the site; and

(e) 2 m high gap-free hoardings will be installed along the northern part of the site to prevent possible spillage of silty runoff to the Sha Lo Tung Valley.

11. With the above mitigation measures in place, the residual water quality and ecological impacts arising from the construction of the development site is not expected to cause any exceedance to the requirements of the Technical Memorandum on Environmental Impact Assessment Process (EIA-TM).

12. While the development site and road improvement works will not result in loss of ecologically important habitats (including country parks, SSSIs, conservation areas and streams), about 0.36 ha of secondary woodland including 0.16 ha at the development site and 0.20 ha due to the road improvement works will be lost and about 2 ha of on-site compensatory planting will be provided.

13. The Nature Interpretation Centre, Multi-cultural Education Retreat and Columbarium Complex are equipped with toilet facilities and the sewage collected will be discharged via the new sewer to public sewerage system. An on-site retention tank is installed to cater for maintenance of the new sewer without the need to discharge sewage into nearby watercourse. During Ching Ming Festival and Chung Yeung Festival, SLTDC will provide shuttle bus service to visitors and trained personnel for crowd control to minimize the human disturbance and potential impact on the nearby ecologically important areas.

Pollution Risks and Impact on Water Gathering Ground

14. The project (including the Development Site and the northern part of the road improvement works along the existing Sha Lo Tung Road) is located within the Water Gathering Ground (WGG). The EA Report recommends a package of measures to prevent pollution and siltation at the WGG:

(a) no earth, building materials, fuel, oil or toxic materials and any other materials which may cause contamination to the WGG are allowed to be

stockpiled or stored on site;

(b) no storage and discharge of flammable or toxic solvents, petroleum oil or tar and other toxic substances will be allowed within the WGG;

(c) all surplus spoil shall be removed from WGG as soon as possible and in the event that the spoil have to be stockpiled on site, the stockpiling will take place at a designated area located at the southern part of the development site which is over 300 m away from the Sha Lo Tung SSSI and streams and the area will also be provided with concrete paving, concrete bunds and interceptor drains along its perimeter to prevent the loss of materials to the surrounding area;

(d) all excavated or filled surfaces which have the risk of erosion shall be protected from erosion at all time;

(e) facilities for washing the wheels of vehicles before leaving the site shall be provided;

(f) any construction plant which causes pollution to the WGG due to leakage of oil or fuel shall be removed off site immediately;

(g) any soil contamination with fuel leaked from plant shall be removed off site and the voids arising from removal of contaminated soil shall be replaced by suitable material;

(h) use of pesticides, herbicides or fertilizers will not be allowed within the WGG without prior approval from the Director of Water Supplies; and

(i) watertight and leak-proof sewers will be used in WGG.

15. Moreover, as a precautionary measure to ensure that pollution risks and impact on the WGG are minimized to the most practicable extent, surface runoff during operation from the paved areas of the development site will be collected and stored in an underground water storage tank with sufficient capacity (1 in 200 years drainage capacity for the first 45 minutes). The surface runoff collected will be discharged via the new stormwater drainage system to the public drainage system.

Other Environmental Impacts

16. The EA Report has also assessed the potential impacts of construction dust and noise, sewerage, waste management, and visual and landscape impact. The assessments concluded that, with appropriate mitigation measures in place, the anticipated environmental impacts are considered acceptable in meeting relevant requirements under the EIA-TM.

ENVIRONMENTAL MONITORING AND AUDIT

17. The EA report has recommended an Environmental Monitoring and Audit programme during both the construction and operation phases of the project.

PUBLIC CONSULTATION

18. SLTDC has made the EA report and Executive Summary available for public inspection from 5 August to 3 September 2008. Members will be briefed on comments received from the public at the meeting.

August 2008
Environmental Protection Department

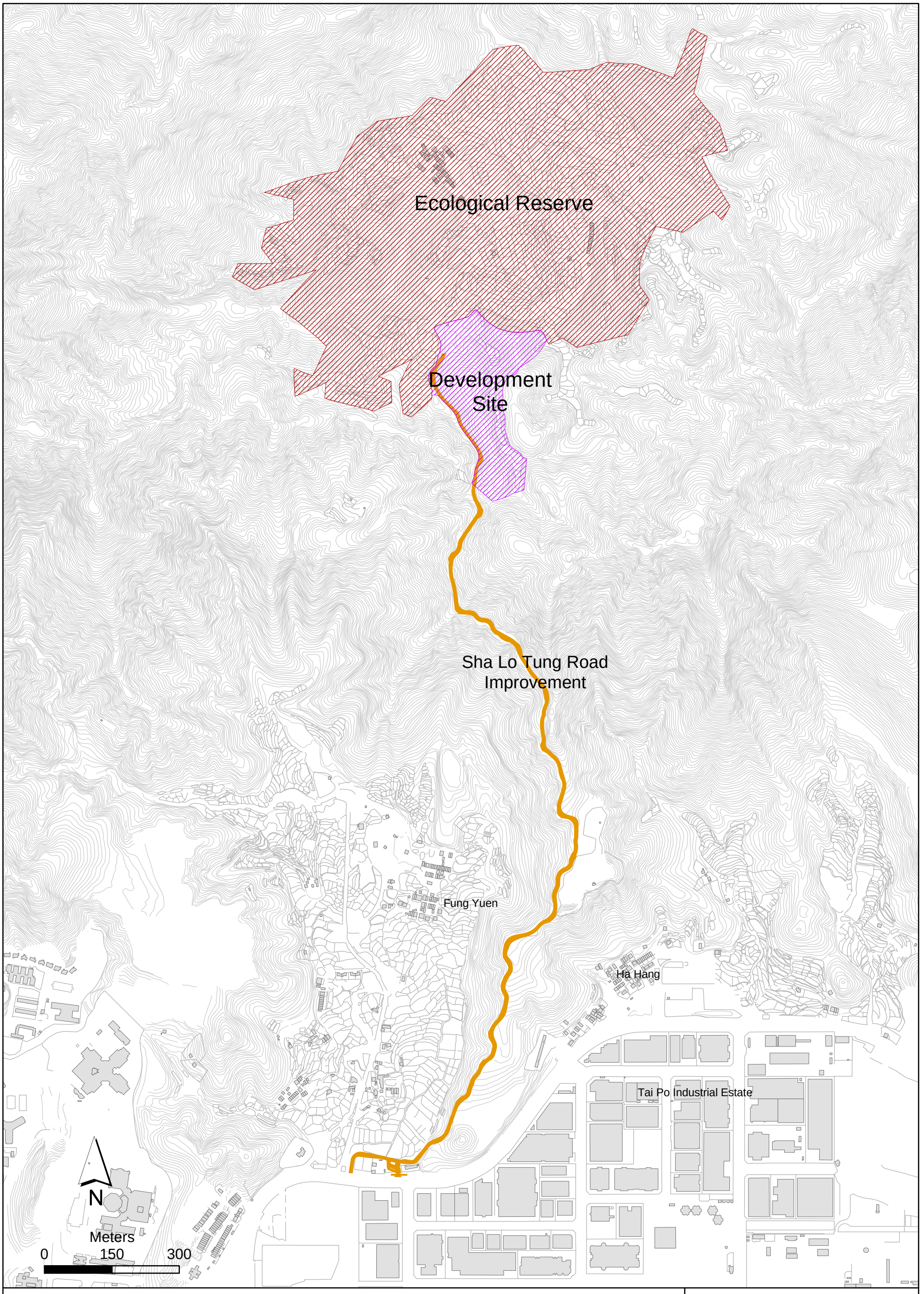


Figure 1

Three Components of the Project: Ecological Reserve, Development Site and Sha Lo Tung Road Improvement

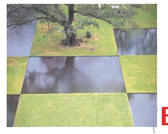
File: Submission_June08/0042510_Figure3.1_9May08_eng.mxd
Date: 25/06/2008

Environmental Resources Management

ERM

Concept Images

Temple Courtyards



Entry Precincts

Cascade Garden

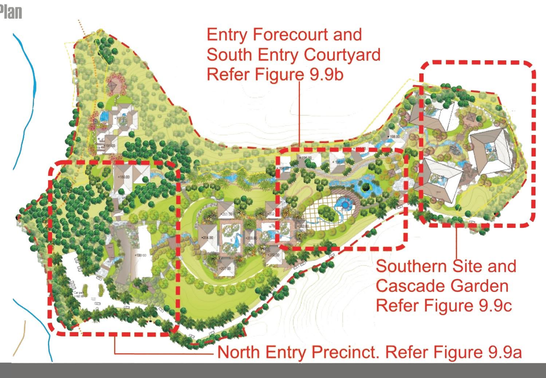
Conservation Garden

Feature Gardens

Legend

- Feature Concrete Paving
- Unit Pavers
- Black Pebbles
- White Raked Gravel
- Random Slate Paving
- Concrete Path
- Gravel Path
- Application Site Boundary
- Area for Compensatory Planting (0.5 Ha on site)
- Water
- Lawn
- Rocks
- Stone Steps
- Timber Bridge/Decking
- Mixed Gravel
- Pavillions
- Buddhist Feature/Statue
- Retaining Wall
- +200.00 Proposed Levels
- Groundcovers
- Shrubs
- Proposed Trees
- ExistingTrees

Key to Precinct Plan



Project Coordinator and Planning Consultant: PPA

Land Advisor: LARRY H.C.TAM AND ASSOCIATES LTD.

Town Planning and Development Consultants: KTA Kenneth To & Associates Ltd.

Client: Sha Lo Tung Development Co. Ltd in association with 綠色力量 GREEN POWER

Environmental Consultant: ERM

Engineering Consultant: ARUP

Traffic Engineers: LLA Consultancy Limited; ARUP

Revisions

A	Interpretation Centre Update	16/05/07

Drawn By	Checked By	Drawing No	Revision No	Scale
LG	SL	Ls1	-	1:750@A1

Option 2
Proposed Option

Master Plan

Interpretation Centre, Columbariums and Multi-Cultural Education Retreat
Sha Lo Tung, Hong Kong

Figure 2

Landscape Architecture & Urban Design
21 / F Lincoln House
979 Kings Road
Taikoo Place
Island East, Hong Kong

Project No. 0042510
April 2008

ERM
ENVIRONMENTAL RESOURCES MANAGEMENT LTD

0 5 10 15 20 25 50 75

Annex B

A Summary of Issues Discussed by the EIA Subcommittee at the EIA Subcommittee Meeting on 8 September 2008

The Environmental Impact Assessment (EIA) Subcommittee discussed the Environmental Assessment (EA) report on "Pilot Project for Public-private Partnership (PPP) Conservation Scheme at Sha Lo Tung (SLT) Valley, Tai Po" at its meeting on 8 September 2008. The issues discussed are summarized below.

Conservation Management

2. On the coverage of the conservation management plan, the project proponent team confirmed that the conservation management plan covered the whole SLT Valley as shown in Figure 1 of the EA report, including private land owned/partially owned by the Sha Lo Tung Development Company (SLTDC), Government land and unpurchased land. The unpurchased land was only about 4% of the private land or about 1 to 2% of the whole SLT Valley.

3. On the possibility of acquiring the remaining unpurchased land within the Ecological Reserve to ensure that all land would be under the ownership of either the Government or SLTDC, the project proponent team explained that while it was their intention to continue acquisition of the remaining private land within the Ecological Reserve area, some lots were complicated in ownership and it was difficult to trace the owners at this stage. Nonetheless, they anticipated that the proportion of unpurchased land would gradually decline as more owners opted to sell their land lots when the PPP Scheme was implemented. Even if some of the owners refused to sell the private lots, there would not be adverse impacts on the conservation plan as the current statutory land use control mechanisms were adequate to regulate land use on these residual private lots. The majority of the unpurchased land was located within the Site of Special Scientific Interest (SSSI) zone and Conservation Area on which small house development was prohibited. The complications in such ownership would not undermine the integrity of the conservation management plan.

4. On the future ownership of the land, the Environmental Protection Department (EPD) advised that the Ecological Reserve would be under the ownership of the Government (except the unpurchased land) after the SLTDC

surrendered all the land it owned in the SLT Valley to the Government. The Green Power (conservation partner of the project) would be entrusted with the responsibility of managing the Ecological Reserve and Nature Interpretation Centre. The Development Site in the Green Belt would be under the ownership of the SLTDC after implementation of the land exchange. The SLT Road would remain a public road but the SLTDC would be entrusted to manage the road.

5. On the role of the proposed Conservation Management Board (CMB), the EPD advised that the CMB would be set up by the Government with the responsibility of overseeing the future management of the whole project, including the Ecological Reserve, the Development Site and SLT Road.

6. On the composition of the CMB, EPD advised that the members would be appointed by the Government. The membership would include the project proponent and Green Power as well as academics, representatives of relevant government departments (such as EPD, Agriculture, Fisheries and Conservation Department (AFCD), Transport Department (TD) and the Police) and relevant bodies (such as Tai Po District Council and green groups).

Potential human disturbance to the Nature Reserve

7. Some Members expressed concern about potential human disturbance to the nature reserve, especially during the festival days, in view of the limited carrying capacity of the SLT Road and the Development. The project proponent team explained that special traffic arrangements would be implemented on festival days to control the number of vehicles and people to the Development Site. The "festival days" referred to the days of Ching Ming Festival and Chung Yeung Festival as well as Sundays immediately preceding and after these two days (i.e. a total of six days in a year). Buyers of Class A niches (20,000) might visit the Columbarium at any time but prior booking would be required during the festival days. Access to the Development Site by vehicle during the festival days would be limited to shuttle coach services provided by the SLTDC. Only eligible ticket holders with prior booking would be allowed to take the shuttle. Buyers of Class B niches (40,000) would not be allowed to visit the Columbarium during the festival days. Control points would be set up and visitors who walked up the SLT Road without valid tickets would not be allowed to enter the Columbarium.

8. Some Members were concerned about the interface problem on the co-existence of a nature reserve near a columbarium setting which would invite

visitors to an ecologically sensitive site. On the potential disturbance to the Ecological Reserve from visitors who entered the reserve after their stay in the Columbarium, the project proponent team explained that visitors would be allowed to stay in the Columbarium for about 2 hours to ensure proper timetabling of shuttle coach services. The Development Site would include open space of about 3.5 ha which should be able to accommodate the visitors with valid tickets wishing to relax within the site after visiting the niches. Sufficient staff would be deployed by the project proponent in the Columbarium for crowd control purpose.

9. On the control of undesirable activities (such as enjoying edible worship offerings) in the Ecological Reserve after paying ancestor worship in the Columbarium, the project proponent team explained that all visitors to the Ecological Reserve would need to observe certain standards of behaviour and sufficient on-site staff would be provided to monitor such behaviour, in particular on festival days. The setting up of the Ecological Reserve would enhance public education on appropriate behaviour in caring for the nature. Moreover, the mode of worshipping was changing in view of the relatively smaller size of nowadays columbarium settings in Hong Kong as compared with traditional larger cemeteries and graveyards. Fewer people were bringing bulky worship offerings to the columbaria. In any case, the Development Site would have ample space for visitors to hang around and relax without having to "spill over" to the Nature Reserve.

Traffic impact assessment and traffic management

10. Some Members expressed concern about the possible under-estimation of the number of visitors in the Traffic Impact Assessment (TIA). They queried the use of traffic survey data at Lions Nature Education Centre, which was not located near country parks or hiking trails, as a reference for visitors to the SLT Nature Interpretation Centre. They also queried the use of survey data at Ching Chung Sin Yuen on a weekday on 20 July 2005 which should be a hot and humid day as a reference for estimating visitation on weekdays to the SLT Columbarium. The project proponent team explained that the Lions Nature Education Centre had similar features as the Interpretation Centre. A day in July was chosen as it was a day during the summer holiday and visitation was expected to be more than normal weekdays. The TIA had been submitted to the TD which had no adverse comments.

11. Some Members queried the use of Ching Chung Sin Yuen, which

was a relatively old columbarium development accessible by public transport, as a basis for projecting visitation to the SLT Columbarium. The visitation to the Ching Chung Sin Yuen was expected not as frequent as that of the recently built columbarium developments. The Junk Bay Columbarium was considered a more appropriate reference. Moreover, the trip pattern to SLT Development would be different as buyers of Class A niches, having paid more, would have a higher propensity for visiting on festival days and thus trip demand from this group of buyers on festival days would be much higher. The project proponent team explained that the Ching Chung Sin Yuen was used as a reference as all the niches there were sold out and it was easily accessible. Visitation was expected to be higher than other columbaria, such as the Junk Bay Columbarium, which was not easily accessible by public transport. In the past, a number of traffic surveys were conducted for a period of few days on several occasions between 2003 and 2007.

12. Some Members queried the use of 940 trip attraction (in-flow) per peak hour rather than 1,220 trip generation (out-flow) (in Table 5-3 of the EA Report) as the basis for projecting the number of visitors to the SLT Columbarium on festival days. Consideration should not be only focused on traffic management for visitors going to the Development Site, but also crowd control within the Development Site as well as traffic management for outgoing visitors. The project proponent team explained that TD was concerned about the traffic flow to the Development Site especially possible congestions at the pick-up points. Thus, the figure of 940 trip attraction was used. Nonetheless, measures could be taken to increase the frequency of shuttle coach service in case the number of outgoing visitors increased to the level of 1,220 trip generation per peak hour. At the same time, the 1,220 visitors was a peak hour demand and not 1,220 visitors were waiting shuttle coach service at the same time. A crowd control management plan, including crowd control inside the Development Site, had been prepared. The ample space within the Development Site, including the open car park, which would be closed for parking during festival days, would be adequate to cater for visitors for shuttle coaches.

13. On the traffic arrangement of non-festival days, the project proponent team confirmed that the general public could drive to the Development Site on non-festival days. On the pattern of visitation to other columbaria, survey findings showed that the level of visitation on Sundays immediately preceding and after Ching Ming Festival and Chung Yeung Festival was about 50% of that on these two days while the level of visitation on Saturdays immediately preceding

and after was about 10% of that on these two days.

14. Some Members expressed concerned about the possible overloading of the SLT Road, not only during the six "festival days" but also Saturdays immediately preceding and after Ching Ming Festival and Chung Yeung Festival as well as other weekends preceding and after these two days.

15. The project proponent team explained that the crux of the matter in terms of traffic and crowd control on festival days was that a cap would be set on the number of visitors from buyers of Class A niches. By setting a quota of 7,400 per day on the six festival days, the traffic demand would be contained. The cap was estimated having regard to the capacity of infrastructure of the Development and pattern of visitation to columbaria of similar size. Some Members considered that while a cap would be imposed on the number of visitors on festival days, there might be frustrations from buyers of Class A niches who could not visit the Columbarium during the festival days as they had paid a higher price with the expectation of being able to visit the Columbarium on festival days. The project proponent team further explained that Class A niches would have to make prior arrangement with the SLTDC for making visit on festival days. This arrangement could help the SLTDC monitor the expected visitors on the festival days and adjust the special traffic arrangement required.

16. Some Members noted that the detailed arrangements of access to the Development Site would still be subject to consultations with the Police, TD and CMB. The project proponent team explained that the consultations referred to operational arrangements, such as details of pick-up/drop-off points and number of helpers. EPD advised that a working group, including the Police and TD, had been set up to examine traffic management and control issues. The project proponent was required, as part of their undertakings, to prepare a detailed traffic management plan to the satisfaction of the Police and TD. Regular reviews would be conducted by the CMB in collaboration with relevant government departments. Traffic contingency plans would be worked out to regulate traffic flows when required. Some Members considered that the CMB should be mindful in imposing changes and tightening controls on the access to the Columbarium as there might be expectations from niche buyers for visiting the Columbarium and deviations from the contractual agreements might lead to disputes.

17. On the management responsibility of traffic arrangement, the project

proponent team explained that the SLTDC would be responsible for operating the shuttle coach service, traffic control of the SLT Road and access control to the Development Site while the Green Power would be responsible for access control to the Ecological Reserve. The Police and TD would render assistance in monitoring the traffic situation on festival days and special occasions. For daily operations, agreement from the Tai Po Police Station had been secured to offer assistance for law enforcement when needed.

Tree felling impacts

18. Some Members were concerned about the large number of trees to be felled for this conservation project and its impacts on the Fung Yuen SSSI. The project proponent team explained that the number of trees to be felled would be about 41 (out of 505) trees within the Development Site and about 327 (out of 672) trees along the SLT Road. No tree would be felled within the conservation area. The upgrading of SLT Road was essential from the pubic safety point of view. The felling of trees would be performed by phases. Most of the tree felling activities would be carried out at the right side of the SLT Road uphill. Most of the trees on the left side of the road would be retained which could partially screen the construction activities. Studies showed that the impacts of the road works on Fung Yuen would be minimal.

19. On the possibility of minimizing the scale of tree felling activities, the project proponent team advised that the estimation was the worst-case scenario and they were confident that the number of trees to be felled could be further reduced during detailed engineering design. Moreover, trees felled in the Development Site would be compensated by planting at a ratio of 5:1. Those along the SLT Road would be compensated at a ratio of 3:1. Soft landscaping would be provided after the completion of road works.

20. On the compensatory planting, the project proponent team advised that native species would be used as far as practicable. While there was sometimes shortage problem for sourcing some special species in the local market and that in the Mainland, it was envisaged that the supply of native woodland species for the project would not be a problem.

Water quality impacts

21. On the possible surface runoff from SLT Road to Fung Yuen, the

project proponent team advised that surface runoff from the Development Site would be intercepted, collected and stored in a water storage tank with sufficient capacity to cater for 1 in 200 years heavy rainfall. The surface runoff would not affect Fung Yuen.

22. On the hydrological changes to the SLT Stream which was located to the north of the Development Site (Figure 5.3 of the EA report refers) and possible impacts on catchment field, the project proponent team explained that the SLT Valley had two basins, namely Drainage Basin 11 and Drainage Basin 15. During the construction phase, the surface runoff from the whole Development Site would be collected and discharged along the SLT Road to the Tai Po area southwards. During the operational phase, only surface runoff from the paved area of the Development Site would be so collected and discharged. It was envisaged that the loss of surface runoff to Basin 11 (i.e. where SLT Stream was located) would be not more than 2.8% during the construction and operational phases.

23. Some Members were concerned about the impacts arising from the loss of catchment area on the streamflow and aquatic ecology in the local tributary of the area caused by the development, in particular in dry seasons. The project proponent team explained that there was no watercourse passing through the Development Site but only one gully-like natural drainage path. Surface runoff along the path would be collected by a separate drainage system with underground drainage pipe passing through the Development Site and then discharged directly to the stream. The hydrological change and reduction in catchment field were anticipated to be minimal.

Landscape and visual impacts

24. On the possibility of minimizing the visual impacts of structures in the Development Site as there were concerns, such as from hikers, about the visual intrusion of the Development which would destroy the natural landscape of SLT Valley, the project proponent team explained that the structures would be small-scale low buildings and the Columbarium would be two-storey buildings surrounded by trees. While the structures would be seen from a number of locations outside the SLT Valley, the visual impact on sensitive receivers was considered acceptable. Residents of Fung Yuen were screened off from the Development in view of the topography and most of other sensitive receivers were relatively remote. From the landscape and architectural points of view, the key

was to blend the development into the natural surroundings. Moreover, the footprint would only cover about 27% of the Development Site. Landscaping and planting would be carried out in the remaining areas. Detailed design of the Columbarium and other structures would be further refined to minimize visual impacts.

Heritage conservation

25. On the preservation of certain village structures with Grade II status (such as Cheung Uk) in the SLT Valley, the project proponent team explained that the potential for heritage conservation within the "V" zones was recognized. However, the current PPP project was nature conservation based which was in line with the Nature Conservation Policy. Future proposals for heritage conservation were not prejudiced by the intended conservation management, but the details and implementation of any future heritage conservation proposal for the graded buildings in the SLT Valley would need to be undertaken under the Built Heritage Conservation Policy.

26. Some Members pointed out that heritage conservation was also an important issue. The state of structures with high heritage value in the SLT Valley would deteriorate if no plan was put in place to preserve them. The project proponent team agreed that such deterioration should be prevented but that such action, especially the adaptive re-use of the small house structures conserved should be carefully considered and taken up under built heritage policy mechanisms.

Development pressure of village houses

27. On some Members' concern about the development pressure of village houses within the SLT Valley in view of the enhanced road access, the project proponent team explained that out of the 1 to 2% of unpurchased land within the SLT Valley, only very small strips of scattered areas were located within the "Village" ("V") zone (as indicated in Figure 1 of the EA report). The majority of these private lots were outside the "V" zone. The chance for building small village houses within the SLT Valley was very slim.

28. On sustainable measures to address future demand from eligible indigenous villagers' descendents for building small village houses within the SLT Valley under the Small House Policy, the project proponent team explained that

the SLTDC had very good rapport with villagers in the area and incentives would be provided to the land owners to build village houses outside the SLT Valley. Moreover, the Government would consider the applications for small house development within the SLT Valley under the Small House Policy from a strategic perspective. There were currently 240 building lots in the "V" zone and 236 of them were owned by the project proponent. Under the PPP Scheme, the project proponent would surrender the rights for development in these building lots. This had already released a major part of development pressure in the "V" zones. EPD advised that information from the Lands Department showed that majority of the eligible indigenous villagers in SLT Valley were applying for building small houses outside SLT Valley. While the SLT Road would be improved, it would still be a single track road which would not be extended to provide access to the "V' zones. Accessibility to the "V" zones would not be improved.

29. Some Members considered that from the planning perspective, there would still be uncertainty in the potential pressure for small house development in the future if the "V" zone was not re-zoned under the statutory process. On the contrary, development might be allowed in the Green Belt subject to the approval of the Town Planning Board. The project proponent team explained that the PPP Scheme did not preclude the option of rezoning the "V" zones in future but such was not intended under the project, as it concerned traditional rights/cultural affiliation and wider policy issues. As for the planned development in the Green Belt, it was in line with the principle of the PPP Scheme as it was an ecologically less sensitive areas at the entrance to the Ecological Reserve and was necessary to fund conservation operations. The development plans would be subject to town planning approval and further public comments as the area had to be rezoned.

Operation of the Columbarium and Nature Reserve

30. On the proposed number of 60,000 niches to be built in the Columbarium, the project proponent team explained that assessment had been conducted on different scenarios on the number of niches to be accommodated. A balance had to be struck having regard to many considerations, such as the availability of sufficient funding for future conservation operations, potential impact of different development potential and capacity constraints, visual impact, technical feasibility and sustainability.

31. On the burning of effigies, paper offerings and incenses during the operation of the Columbarium, the project proponent team confirmed that burning

of effigies and paper offerings would be prohibited as stated in section 3.3.6.1 in the EA report. While extensive burning of incenses and candles would not be allowed, one incense would be lit up in the Multi-Cultural Education Retreat which was designed for promotion of religious education.

32. On measures to prohibit activities, such as wargames and race by four-wheel drive, which would destroy the natural beauty of SLT Valley, the project proponent team explained that while the Ecological Reserve would be opened to the public, it would be managed by the Green Power. There would be staff to monitor the site day and night. The number of people entering the Ecological Reserve would be controlled. No party could enter the Ecological Reserve for activities which were inconsistent with the nature conservation principles.

33. On the provision of toilet facilities in the Ecological Reserve, the project proponent explained that visitors could make use of the public toilets at the Interpretation Centre. AFCD advised that it was uncommon to provide public toilet facilities inside nature reserves, such as in the case of Hong Kong Wetland Park. Visitors could make use of toilet facilities at the visitor centre.

34. On the operation of the Columbarium, EPD advised that as the niches would be sold by phases, the operation would be closely monitored by the CMB and detailed operations could be fine-tunned in light of experience.

Provision of EM&A Manual

35. Some Members noted that the EM&A Manual for the project was not provided together with the EA report. The project proponent team explained that the EM&A requirement and programme were presented in Section 12 of the EA report. A detailed EM&A Manual would be submitted to the CMB prior to the commencement of construction works as the details had to be firmed up at a later stage.

36. EPD advised that according to the Technical Memorandum on the Environmental Impact Assessment Process (TM), the need and scope of the EM&A requirement should be identified in the EIA report. The EM&A Manual could be submitted before the issue of Environmental Permit or before the commencement of construction works. According to past records, about 30% of the EIA reports of which the EM&A Manuals were submitted after the approval of

the EIA reports. Moreover, the EA report of the SLT project had been circulated to and endorsed by relevant government departments based on the standards in the TM, as in the case of other EIA reports, before submission to the Subcommittee.

37. Some Members considered that it was a usual practice for project proponents of major projects to submit EM&A Manual together with the EIA report. The Manual was important in defining the responsibility of relevant parties, determining the scope of control and laying down measures to monitor the implementation of mitigation measures. This was particularly important for the PPP proposal in which different parties were involved.

38. EPD advised that the mitigation measures provided in the EA report and undertakings of the project proponent would be included in the legally binding undertaking and the project proponent would be required to provide a performance bond to ensure compliance. Should there be any breach, the Government would take remedial actions and call the bond.

Other issues

39. Some Members noted some concerns in the public comments that the EA report failed to address the importance of SLT Valley as a significant breeding site for wild bird species in Hong Kong. The Hong Kong Nightbird Survey of 2000-01 showed that SLT Valley was one of the best sites in terms of total numbers of nightbirds detected and species diversity. Members considered that attention should be paid to this aspect in minimizing disturbance to the birds.

40. Some Members noted some concerns in the public comments about whether the project should be a designated project under the EIA Ordinance and related legal issues. EPD advised that all the public comments received by the department would be considered seriously and legal advice would be sought where necessary.

Annex C

EA report on "Pilot Project for Public-private Partnership Conservation Scheme, Sha Lo Tung Valley, Tai Po"

Supplementary information provided by the Project Proponent on Questions raised by ACE EIA Subcommittee after the Subcommittee meeting on 8 September 2008

(1) Regarding the Sha Lo Tung Stream which is located to the north of the proposed development site (Fig 5.3 of the EA report refers), Members were concerned about the impacts arising from the loss of catchment area on the streamflow and aquatic ecology caused by the development. Please provide information on –

(a) the estimated extent of reduction in the flow of the local tributary caused by the development on the localized catchment area (i.e. catchment area at and near the development site and not the whole catchment area of the Sha Lo Tung Valley), in particular in dry seasons; and

(b) assessment conducted on the localized potential impacts, including the potential impacts on aquatic organisms in the local tributary of the area.

Response to (1)(a):

The streamflow generated within the Sha Lo Tung Valley is referenced from the rainfall data recorded by Hong Kong Observatory's rain gauge located at Tai Mei Tuk, which is the nearest rain gauge to the Site and is the only rain gauge in the Tai Po area (***Figure 1***). Eight consecutive years of rainfall records were obtained as shown in ***Appendix 1***. It was found that the average daily rainfall during the dry season ranges from 2.9mm to 8.2mm (***Table 1***). Over 80% of the days in the dry season had no rainfall. Due to the limited rainfall during the dry season, it is expected that rainfall will mainly percolate through soil rather than flow over the land surface entering Sha Lo Tung Stream within the catchment area.

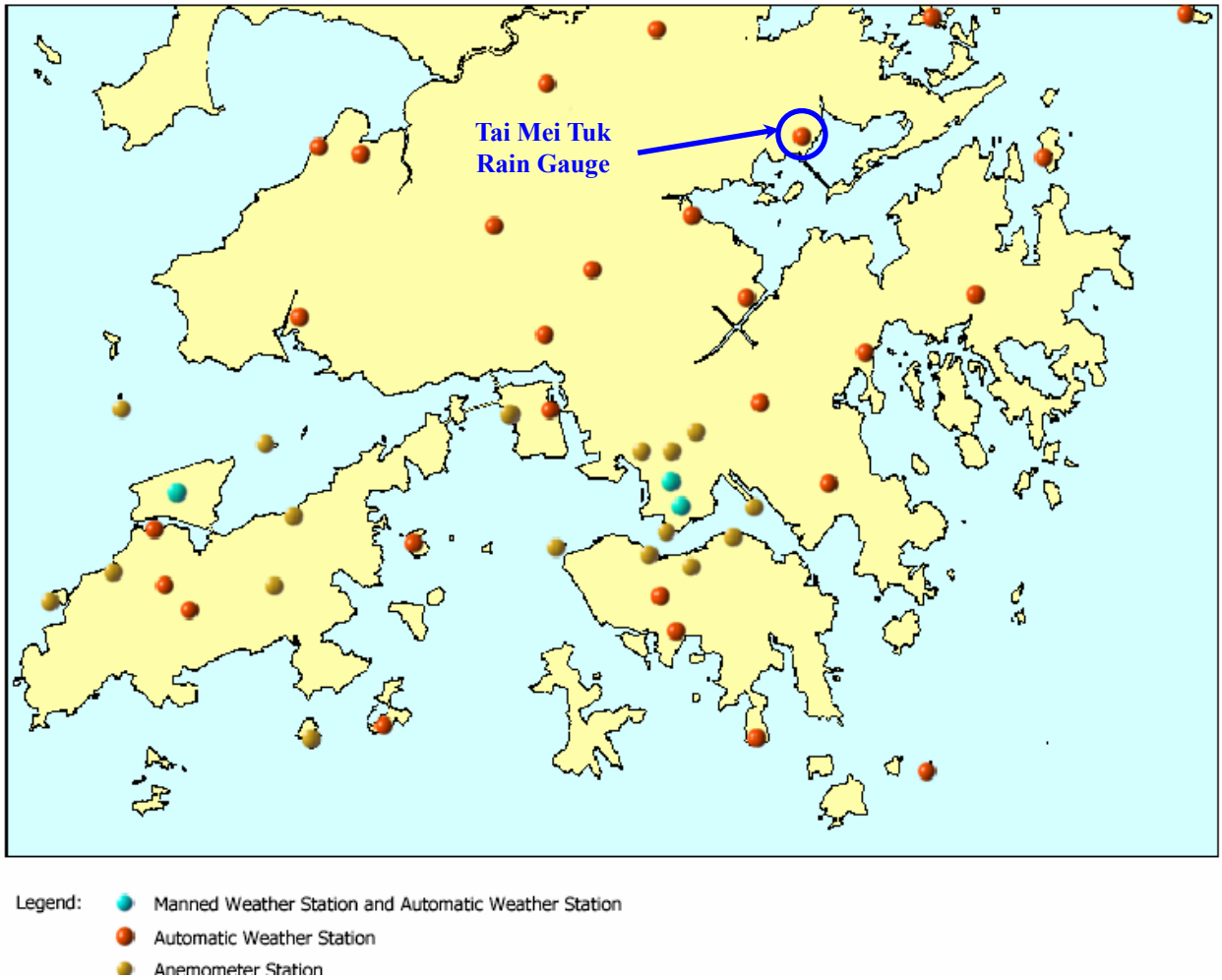


Figure 1 Location of Weather Station

Table 1 Summary of Rainfall Data in Dry Season during 2000 to 2008

Dry Season (Nov - Mar)	Total Rainfall (mm)	Total Non-Rainy Days	Total Rainy Days	Average Daily Rainfall (mm) (exclude non-rainy day)
2000 - 2001	240.0	123	30	8.0
2001 - 2002	154.0	131	22	7.0
2002 - 2003	138.5	128	25	5.5
2003 - 2004	237.0	124	29	8.2
2004 - 2005	86.5	123	30	2.9
2005 - 2006	78.0	130	23	3.4
2006 - 2007	112.5	127	26	4.3
2007 - 2008	84.5	131	22	3.8

Sha Lo Tung Stream falls within "Development Site" Sub-catchment and "Sha Lo Tung Valley" Sub-catchment of Basin 11, with total areas of approximately 615,750m^2 (= 61.575 ha) and

4,512,500m^2 (= 451.25 ha) respectively (***Figure 2***). The Development Site is a rural knoll area, originally with a small farming area located at the northern part of the area and some graveyards located at the uphill areas within the site. There are no watercourses/ tributaries passing through the Development Site or the areas (which identified as woodland habitat) between Sha Lo Tung Stream and the Development Site. Any paved areas within the Development Site have the potential to restrict the dry season rainfall percolation. The paved areas within the Development Site during construction and operation is expected to be approximately 1.69 ha and 1.46 ha respectively (refer to *Table 4.13* of the EA Report).

The estimated extent (%) of reduction in the dry season streamflow of the southern section of Sha Lo Tung Stream (immediate adjacent to the Development Site) caused by the development on the localized catchment area ("Development Site" Sub-catchment) during construction and operation of the Development Site is expected to be approximately 2.74% (=1.69 ha/ 61.575 ha x100) and 2.37% (=1.46 ha/ 61.575 ha x100) respectively. The estimated extent of reduction in the dry season streamflow of the whole Sha Lo Tung Stream (including both "Development Site" and "Sha Lo Tung Valley" Sub-catchments) caused by the development during construction and operation of the Development Site is expected to be approximately 0.33% (=1.69 ha/ (61.575+451.25 ha) x100) and 0.28% (=1.46 ha/ (61.575+451.25 ha) x100) respectively.

In the event of heavy rainfall (usually during the wet season or very occasionally during the dry season), the surface runoff will be collected by the proposed drainage system at the Site and will discharge into the existing drainage system at Ting Kok Road via the proposed drains at Sha Lo Tung Road during the construction phase. In accordance with hydrological calculations (*Annex 3A* of EA Report), the maximum surface runoff generated in "Development Site" Sub-catchment of Basin 11 before development of the Site under a 1 in 200 year rainstorm is estimated to be 73,797m^3. The surface runoff is collected by Sha Lo Tung Stream to the north of the Site and is finally discharged to Hok Tau Reservoir. While the maximum surface runoff generated in the Site after development under a 1 in 200 year rainstorm is estimated to be 2,059 m^3. It is envisaged that not more than 2.8% of the surface runoff generated in Basin 11 after development of the Site will be diverted to the south of the Development Site and discharged outside Water Gathering Ground during construction.

The exiting water discharge flow within Drainage Basin 11 (Indus, approximately 88%) and Drainage Basin 15 (Tai Po, approximately 12%) will be maintained through well-designed drainage and pumping systems during the operation of the Project. The hydrological changes to Sha Lo Tung Stream and the impacts on catchment yield are not expected to occur during operation of the Project.

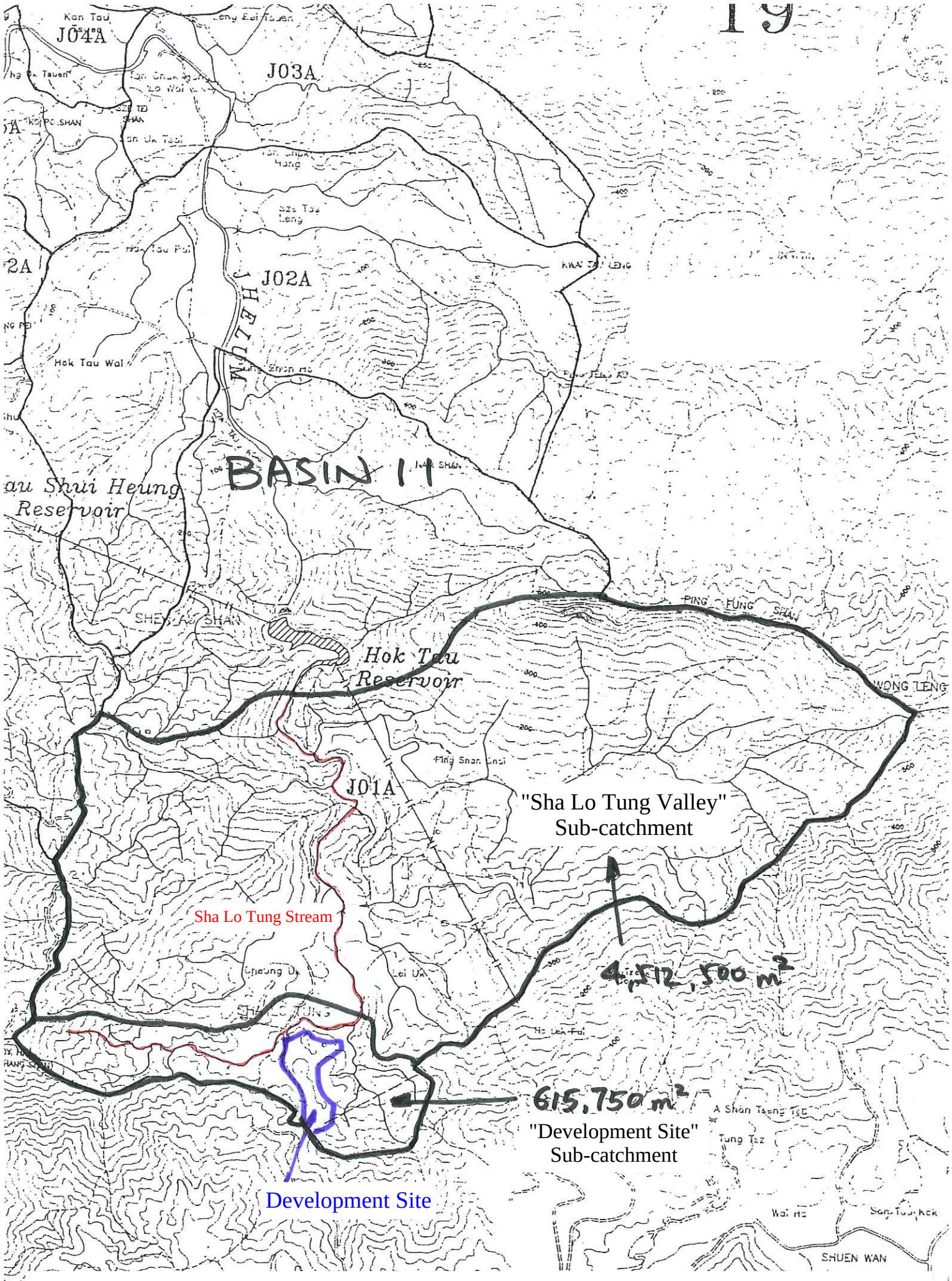


Figure 2 Sub-Catchement Areas within Basin 11 (Not to Scale)

Response to (1)(b):

Similar to other Hong Kong streams, Sha Lo Tung Stream also undergoes marked seasonal changes and the stream flow volume is determined by seasonal rainfall patterns, flows vary significantly between dry and wet seasons. Hong Kong's aquatic fauna can make seasonal adjustment to their behaviour and metabolism in order to deal with local changes in seasonal water flow.

The estimated extent (%) of reduction in streamflow of the southern section of Sha Lo Tung Stream (immediate adjacent to the Development Site) caused by the development on the localized catchment area ("Development Site" Sub-catchment) in both dry and wet seasons is expected to be not more than 2.8% during construction and operation of the Development Site. Such estimated loss of streamflow would represent only a small reduction, and the reduction will be significantly lower when the whole Sha Lo Tung Stream is considered (around 0.3%). It should also be noted that there are no watercourses passing through the Development Site. The hydrological change and reduction of the catchment field are considered to be low due to the Project. Given that the aquatic organisms in Sha Lo Tung Stream naturally experience a dramatic fluctuation in streamflow pattern and they are well adapted such seasonal variations, the insignificant hydrological change and reduction in the catchment field are expected to be of minimal impact to the aquatic organisms. No unacceptable ecological impacts on the Sha Lo Tung Stream aquatic organisms are anticipated.

(2) Regarding the traffic impact assessment, Members were concerned about the possible under-estimation of the number of visitors during the festival days which is used as a basis for calculating the number of niches to be built in the Columbarium. They were also concerned about the carrying capacity at the Columbarium during festival days and possible impacts on the nearby Ecological Reserve. Please provide information on –

(a) projection on the number of visitors to the proposed Columbarium on festival days by using 1,220 trip generation (in Table 5-3 of the EA report) as the basis, plus a certain level of buffer;

(b) projection on the potential traffic impact and number of visitors to the proposed Columbarium on festival days by using data from more recently built columbarium developments, given that Ching Chung Sin Yuen, the one referred to in the EA report, is a relatively old columbarium development and visitation is not expected as frequent as that of the recently built columbarium developments;

(c) any further measures on the control of visitors within the Columbarium Complex during festival days; and

(d) any further measures to avoid human disturbance and adverse impacts on the nearby ecologically important areas, in particular during festival days.

Response to (2)(a&b):

In the past years, a number of traffic surveys have been done and a comprehensive review on the research and survey data of Columbarium on festival days was conducted under this Study to devise the maximum trip generation rate of 940 in-flow and 1,220 out-flow visitors/hour. Further reference is made to various columbarium developments including Ching Chung Sin Yuen in the Report and Tseung Kwan O (TKO) Chinese Permanent Cemetery as shown in a LegCo Paper "LegCo Question No.LCQ10: Traffic arrangements for access to Junk Bay Chinese Permanent Cemetery" presented by the Secretary for Home Affairs to the Legislative Council on 3rd May 2006 (***Appendix 2***).

Information in the LegCo Paper has been extracted for comparison purpose. During the peak festival periods, the highest number of visitors were 90,448 (23,372 + 67,076). Divided by the total number of graves/niches of 121,055 and applied the hourly distribution factors, TKO Chinese Permanent Cemetery therefore generates 1,095 visitors/hour per 20,000 graves/niches. It should however be emphasized that TKO Chinese Permanent Cemetery cannot be a direct comparison to the proposed columbarium in Sha Lo Tung, which will have a cap of 7,400 visitors on each of the festival days, instead of unlimited flow of visitors in other columbarium/cemetery facilities.

In the TIA report, 940 incoming visitors/hour was adopted to estimate the shuttle bus frequency to demonstrate that there would not be queues developed at the pick-up points. Even if buffer is included in estimation (by adopting 1,220 visitors/hour) in the estimation of the shuttle bus outgoing trips, 55 trips would be adequate to meet the visitor demand. With implementation of proper traffic arrangement on festival days at Sha Lo Tung Road, this peak hour demand could be accommodated.

Response to (2)(c):

Management measures to regulate visitor movements during festival days could be arranged. The management measures by regulating pedestrian circulation queuing for shuttle bus services within the designated holding area are found effective in crowd control. Visitors will be directed to the designated holding areas including two Halls and the rest of the areas inside the multi-cultural retreat during the festival period. These facilities can provided a maximum visitors holding capacity of approximately 2,000 visitors with total GFA of 5,500m^2. In addition, the closure of the Interpretation Centre during the festive period also helps to regulate the visitors disturbing the Valley.

Response to(2)(d):

The major trails to Cloudy Hill, Hok Tau Reservoir and Ping Shan Tsai via Sha Lo Tung Ecological Reserve (SLTER) will be maintained to enable uninterrupted Country Park access for visitors. Signage and planting will be used to divert the visitors away from the ecological sensitive areas. Activities of visitors within the Ecological Reserve can be controlled to a large extent through the provision of marked trails, planting, and restriction of other access to guided tours only.

The design of the Ecological Reserve (ER) is catered for nature conservation rather than a park. There will be very limited recreational features such as sitting out areas, while no toilet, picnic area, or open lawn will be available inside the Ecological Reserve. More importantly, access to Sha Lo Tung by vehicle during festive periods is limited to shuttle service provided by SLTDC. Only eligible ticket holders with prior booking are allowed to board on the shuttle and they are advised to remain in the columbarium for about two hours. Visitors would not normally have sufficient time to visit columbarium, walk to the ER and queue up for return shuttles. Therefore, chances of leisure visitors wandering in the ER will be very low.

During the Festival Day, the ER will have 30 ambassadors to monitor visitors and their behaviour. Presence of on-site staff, regular patrol and monitoring will ensure minimal disturbance to the ER. Enforcement actions will be taken by the relevant government departments including

AFCD against illegal activities identified. Given this project will have a cap of 7,400 visitors on festival days as mentioned in *Section 3.7* of EA Report, there would not be unlimited flow of visitors on festival days as observed in other columbarium sites, such as Ching Chung Sin Yuen or Tseung Kwan O Chinese Permanent Cemetery.

(3) Members noted that while a chapter on Environmental Monitoring and Audit (EM&A) requirement is provided in Section 12 of the EA report, a detailed EM&A Manual is not provided together with the EA report. Please provide the EM&A Manual on the development proposal.

Response to (3):

An EM&A Manual is provided separately.

[Note: The EM&A Manual is circulated to Members.]

Appendix 1

香港天文台 HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2000

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	4.5	11.5	13.0	1.0	1.0	-	33.5	54.5	-	-	-
02	-	2.0	21.0	6.5#	45.5	0.5	16.5	35.0	44.0#	-	-	1.0
03	-	1.5	-	26.0#	7.5	-	16.5	51.0	*****	-	-	-
04	-	-	-	1.0	-	-	-	19.5	-	-	-	-
05	-	-	-	-	-	-	5.0	12.0	-	-	-	-
06	-	-	-	1.0	-	-	11.5	-	-	-	0.5	-
07	-	-	-	-	-	-	-	-	6.0	0.5	27.5	-
08	-	-	-	-	-	13.5	2.0	-	0.5	-	*****	-
09	-	-	-	-	-	17.0	0.5	-	-	-	-	-
10	-	-	-	-	114.5	1.0	9.0	-	-	-	0.5	-
11	-	-	3.0	-	1.0	13.0	27.0	-	-	-	7.0	0.5
12	-	-	11.0	-	-	99.5	2.0	-	-	0.5	33.0	28.5
13	-	-	-	29.0	-	1.0	-	-	-	3.5	-	25.0#
14	-	-	-	232.0	-	-	-	1.5	-	4.0	-	*****
15	-	-	-	5.5	-	-	-	2.0	-	-	-	-#
16	-	-	0.5	-	-	-	16.0	0.5#	-	-	15.5	-
17	-	-	-	-	-	21.0	77.5	-	-	-	-	-
18	-	-	-	-	-	102.0	67.5	*****#	-	-	0.5	-
19	-	-	-	-	1.5	5.5	24.5	*****	-	8.0	-	3.0
20	-	1.5	-	-	-	33.0	66.5	*****	7.0	79.5	-	0.5
21	-	2.0	-	1.0	-	4.0	9.5	*****	-	14.0	-	-
22	-	2.0	-	9.0	-	-	-	*****	-	59.5	-	-
23	29.5	3.5	-	54.0	-	10.0	-	*****	-	2.5	-	-
24	63.0	0.5	-	0.5	6.5	4.5	-	*****	-#	-	-	-
25	8.5	2.0	-	1.0	44.0	16.0	-	*****	1.0#	2.5	-	-
26	-	1.0	-	15.5	-	4.0	-	*****	*****	-	-	-
27	-	-	-	-	-	-	-	*****	*****	-	-	-#
28	-	5.0	-	67.0	-	-	-	*****	-#	-	-	-
29	-	6.5	-	2.5	1.0	-	-	*****	-	-	-	-
30	-		-	0.5	-	-	-	*****	-	-	-	-
31	-		-		1.0		3.0	16.5#		-		-
Total	101.0	32.0	47.0	465.0#	223.5	346.5	354.5	171.5#	113.0#	174.5	84.5	58.5#

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2001

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	0.5	-	-	1.0	-	13.5	*****	135.5	-	-#	*****
02	-	-	-	-	-	1.5	10.0	*****	26.5	-	-	*****
03	-	-	1.0	-	8.0	-	4.5	-	35.0	-	-	*****
04	-#	1.0	-	31.0	-	11.0	-	-	-	-	-	*****
05	*****	-	-	22.0	-	64.5	12.0	-	34.0#	-	-	*****
06	*****	-	-	3.5	-	14.5	115.0	12.5	30.5	-	-	*****
07	*****	-	-	0.5	-	109.0	32.5	-	30.0	-	-	*****
08	-	-	-	0.5	3.0	40.0	2.5	-	-	-	-	*****
09	-	-	-	62.0	19.5	*****#	-	-	-	-#	-	*****
10	-	-	-	-	-	*****	-	4.0	-	-#	-	*****
11	0.5	-	3.0	4.5	-	*****	-	11.0	-	-	-	*****
12	-	-	1.0	-	-	17.5#	-	10.5	-	-	-	*****
13	0.5	-	-	-	-	27.0	8.5	1.5	-#	-	-#	-#
14	-	-	-	-	-	0.5	0.5	-#	*****	-	-#	-
15	-	-	-	-	1.0	-	61.5	-#	*****	-	-#	-
16	-	-	-	-	-	9.0	0.5	23.0	*****	-	-	-
17	-	-	-	-	2.0	5.5	38.5#	-	*****	-	-	4.0
18	-	-	-	6.5	29.5	-	94.5	-	*****	-	-	14.5
19	-	-	-	2.5	9.0	-	10.0	0.5	-	-	-	-
20	-	-	0.5	-	5.0	12.5	*****	-	-	-#	-	-
21	-	-	-	18.5	26.5	-	*****	-	-#	-	-	-
22	-	-	-	10.5	2.0	-	*****	-	-	-#	-	-#
23	-	-	-	-	-	29.0#	*****	-	-	-#	-	*****
24	-	-	-	-	-	*****	*****	-	-	-	-	-#
25	5.5	9.5	33.5	4.0	-	*****	*****	-	-	-	-#	-
26	15.0	-	-	0.5	-	*****	*****	-	-	-	-	-
27	6.5	-	2.0	-	-	*****	*****	16.0	-	-	-	-
28	14.5	0.5	-	-	1.0	-#	*****	7.0	-	-#	-#	-#
29	-		2.0	-	-	-	*****	55.5	-	-#	-#	-
30	-		-	-	48.0	4.0	*****	154.0	-	-	-	-
31	-		-		-		*****	35.0		-		-
Total	42.5#	11.5	43.0	166.5	155.5	373.0#	404.0#	330.5#	291.5#	0.0#	0.0#	18.5#

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2002

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	0.5	-	-	-	-	4.5	-#	-	1.0	-	2.5
02	-	3.5	-	-	-	-	1.0	-	0.5	-	-	-
03	-	-	-	-	-	-	1.5	15.5	52.0	-	-	-
04	-	-	-	-	-	-	-	9.0	-	-	-	-
05	-	4.0	-	-	0.5	0.5#	-	6.0	-	-	-#	-
06	-	0.5	-	3.0	13.5	0.5	-	163.0	-	-	*****	-
07	-	-#	-	-	-	-	-	1.0	-	-	*****	-
08	-	-	-	-	-	-	1.0	26.5	-	-	*****	2.5
09	-	-	-	-	16.0	15.5#	2.5	115.0	-	-	*****	-
10	-	-#	-	3.0	16.5	2.5#	-	84.0	39.5	-	*****	-
11	-	-	-	0.5	28.0	124.0#	4.5	3.0	18.0	-	*****	10.0
12	-	-	-	-	1.5	4.5	-	-	5.5	-	*****	0.5
13	-	-	-	-	2.0	-	-	-	7.0	-	*****	-
14	2.0	-	-	-	17.5	-	-	-	81.5	-	*****	-
15	1.5	-	-	-	0.5	7.0	-	-	174.0	-	*****	-
16	0.5	-	1.0	-	19.5	8.0#	39.5	-	53.5	-	*****	-
17	-	-	-	-	26.0	1.5#	69.5	-	126.5	4.5	*****	-
18	-	-#	-	-	7.5	-	65.5	48.0	-	19.0	*****	-
19	0.5	-	-	-	29.0	1.5#	20.0	24.0	-	-	*****	13.0
20	-	-	-	-	0.5#	6.5#	14.5	6.5	-	-	*****	14.5
21	-	-#	-	-	-	-#	0.5	1.0	0.5	12.0	*****	1.0
22	-	-	-	-	19.0	-	15.0	-	31.0	-	-#	-
23	-	-	49.5	-	0.5	2.0	19.0	-	-	8.0	-	-
24	-	-	35.0	-	0.5	-	10.0	-	1.0	-	0.5	-
25	1.0	-	1.0	-	-	1.0	2.0	-	2.5	-	-	-
26	7.5	-	-	-	-	-	28.5	-	0.5	2.0	-	8.0
27	10.5	-	-	-	-#	-	1.5	-	2.5	1.5	-	6.5
28	0.5	-	0.5	-	-	0.5	48.5	-	0.5	-	4.5	-
29	-		12.5	-	-	-	22.0	-	-	-	-	-
30	-		2.0	-	0.5	-	20.5	0.5	-	13.5	4.0	-
31	-		1.5		-#		21.5#	2.0		5.0		1.0
Total	24.0	8.5#	103.0	6.5	199.0#	175.5#	413.0#	505.0#	596.5	66.5	9.0#	59.5

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2003

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	-	-	0.5	0.5	-	-	-	-	-	-	-
02	-	-	-	-	-	-	-	-	98.0	-	-	-
03	-	-	-	8.5	63.0	-	-	-	15.0	-	-	-
04	-	-	4.5	2.0	95.0	-	-	11.0	2.0	3.5	-	-
05	-	-	9.5	-	278.5	-	-	27.5	-	-	-	-
06	18.5	-	9.0	0.5	0.5	11.0	-	60.0	8.0	-	-	-
07	-	-	-	6.5	1.0	13.0	-	-	48.5	-	1.0	-
08	-	8.5	-	23.5	-	0.5#	-	4.0	3.5	-	33.0	0.5
09	-	-	2.0	0.5	-	52.5#	-	7.5	-	-	0.5	-
10	-	-	3.0	4.5	-	64.0	18.0	-	-	-	-	-
11	-	-	-	0.5	-	108.0	9.5	1.5	-	34.0	-	-
12	-	-	-	-	-	29.0	0.5	8.0	-	-	-	-
13	-	-	-	-	-	14.0	-	2.0	-	0.5	-	-
14	-#	-	-	0.5	5.5	80.0	-	6.5	64.0	-	-	-
15	-	-	-	-	-	15.0	-	1.5	62.0	-	-	-
16	-	-	-#	0.5	1.5	2.5	*****#	21.5	9.5	-	-	-
17	-	-	-#	-	2.5	1.5	*****	60.0	0.5	-	-	-
18	-	-	-	-	7.0	-	*****	-	-	-	-	-
19	-	-	0.5	-	1.0	-	*****	-#	-	-	3.5	-
20	-#	-	8.0	-	-	8.0	*****	-#	-	-	0.5	-
21	-#	-	-#	-	-	43.5	*****	13.0	14.5	-	-	-
22	-	-	1.0	-	-	15.0	*****	61.5	0.5	-	-	-
23	-	-	2.0	-	-	11.5	7.5	0.5	-	-	-	-
24	-	-	3.5	-	7.0	-	16.0	38.5	-	-	-	-
25	-	-	-	-	4.5	-	15.0	9.5#	-	-	-	-
26	-	-	-	-	-	32.5	2.5	0.5	-	-	-	-
27	-	-	-	-	-	22.0	-	-	-	-	-	-
28	-	-	-	-	-	19.0	-	-	-	-	-	-
29	-		-	-	-	-	-	-	0.5	-	-	-
30	-		-	1.5	-	1.5	-	-	1.5	-	-	-
31	-#		-		-		-	3.5		-		-
Total	18.5#	8.5	43.0#	49.5	467.5	544.0#	69.0#	338.0#	328.0	38.0	38.5	0.5

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2004

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	-	0.5	14.0	-	-#	-	-	-	*****	-	-
02	-	1.5	1.5	1.0	-	-	0.5	-	-	*****	-	-
03	-	3.5	-	-	-	0.5	33.0	-	0.5	*****	-	-
04	-	18.5	-	-	21.5	-	18.0	3.0	4.5	-#	-	-
05	-	9.0	-	-	3.5	-#	4.5	7.0	-	-	-	-
06	-	-	-	-	-	19.5#	1.0	44.0	5.0	-	-	-
07	-	16.0	-#	1.0	-	12.5	16.5	-	-	-	-	-
08	-	11.0	-	-	90.5	-	-	-	6.5	-	-	-
09	-	-	-	-	-	-	-	-	31.5	-	0.5	-
10	0.5	-	-	-	-	-	29.0	-	0.5	-	-	-
11	2.5	-	-	-	-	-	6.0	8.0	-	-	-	-
12	-	-	-	-	-	-	4.0	1.0	-	-	-	-
13	-	-	-	3.0	-	-	11.0	-	-	-	-	-
14	-	-	-	45.5	11.0	-	-	-	-	-	-	-
15	-	-	-	-	1.5	33.0	-	-	-	-	-	-
16	-	2.0	-	1.5	-	5.0	22.5	-	-	-	-	-
17	-	-	1.5	17.5	-	-	53.0	-	-	-	-	-
18	16.5	-	-	-	-	-	-	-	8.0	-	-	-
19	25.0	-	-	-	2.0	-	40.0	3.5	5.0	-	-	-
20	1.5	-	-	-	-	2.5	20.0	1.5	-	-	-	-
21	-	-	-	-	9.5	10.0	27.0	61.5	13.0#	-	-	-
22	-	-	-	-	1.5	2.5	-	30.5	*****	-	-	-
23	0.5	-	-#	-	-	12.5	-	-	*****	-	-	-
24	-	-	0.5	1.0	-	6.0	-	18.5	*****	-	-	-
25	-	-	6.0	-	1.5	0.5	-	-	-#	-	-	-
26	-	-	9.0	-	-	-	-	0.5	-	7.5	-	-
27	-	-	0.5	25.0	-	3.0	-	12.0	-#	-	-	-
28	-	-	-	4.0	26.5	-	1.5	33.5	-#	-	-	-
29	-	-	2.5	0.5	-	-	87.0	120.0	-	-	-	-
30	-		65.0	-	-	-	1.5	7.5	-#	-	-	-
31	-		3.0		-		-	7.0		-		-
Total	46.5	61.5	90.0#	114.0	169.0	107.5#	376.0	359.0	74.5#	7.5#	0.5	0.0

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2005

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	0.5	6.0	3.5	-	-#	40.5	-#	-	-	-	-
02	-	-	15.5	0.5	1.0	8.0	-	-	-	1.5	-	-
03	-	0.5	9.5	-	-	4.5	-	-	48.0	-	-	-
04	-	-	1.5	-	-	9.0	-	-	5.5	-	-	-
05	-	-	-	-	-	7.0	-	-	-	2.0	-	-
06	-	-	-	-	27.0	-	-	-	-	-	-	-
07	-	0.5	-	-	-	0.5	3.0	-	-	-	-	-
08	-	-	-	0.5	47.0	-	0.5	-	-	-	-	-
09	-	-	-	-	56.5	9.5	10.5	2.0	-	-	-	-
10	-	-	-	-	68.5	0.5	2.0	9.5	3.5	-	-	-
11	-	-#	3.0	1.5	1.5	0.5	-	4.5	-	-	-	-
12	-	*****	13.0	6.0	-	2.0	-	2.0	-#	-	-	-
13	2.0	*****	0.5	13.0	-	2.0	-	9.5	-	-	-	-
14	-	-#	-	-	-	4.0	-	1.0	-	-	-	-
15	-	0.5	-	-	-	16.5	-	1.0	-	-	1.5	-
16	-	-	-	3.0	14.5	33.0	-	16.5	-	-	-	-
17	-	2.0	-	-	10.0	27.5	-	15.0	6.5	-	-	-
18	-	3.5	-	-	6.0	75.5	-	22.0	0.5	-	-	-
19	-	-	-	-	31.5	19.5	1.5#	48.5	4.5	-	-	-
20	-	-	-	-	9.0	9.0	17.0	120.5	-	-	-	-
21	-	0.5	-	-	6.0	103.0	3.0	12.0	-	-	-	-
22	-	0.5	3.0	-	-	75.5	22.5	-	-	-	-	-
23	-	0.5	-	-	10.0	90.5	-	-	1.5	-	-	-
24	-	1.0	-	-	22.0	58.0#	-	0.5	3.0	-	-	-
25	-	0.5	-	4.0	-	*****	-	-	14.5	-	-	-
26	-	1.0	0.5	-	21.0	*****	-	3.0	39.0	-	-	-
27	-	1.5	1.5	13.5	10.0#	*****	-	-	8.5	-	-	-
28	0.5	9.0	-	0.5	*****	*****	0.5	-	-	-	-	2.0
29	-		-	-	*****	*****	16.0	3.5	-	-	-	-
30	0.5		6.5	-	*****	12.0#	*****#	-#	-	-	4.0	4.0
31	-		0.5		*****		*****	-		-		-
Total	3.0	22.0#	61.0	46.0	341.5#	567.5#	117.0#	271.0#	135.0#	3.5	5.5	6.0

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2006

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	-	-	-	-	32.0	-	*****	-	-	-	-
02	-	-	-	-	39.5	22.5	5.0	*****	-	-	-	-
03	-	-	-	-	31.5#	25.5	-	*****	-	-	-	-
04	-	-	-	-	-	2.0	9.5	*****	*****	-	-	-
05	-	-	4.0	-	-	4.0	1.5	*****	*****	-	-	-
06	-	-	0.5	-	-	7.5	1.0	*****	*****	-	-	-
07	-	-	-	-	-	2.5	1.5	*****	*****	-	-	-
08	-	-	-	-	-	8.5	5.0	*****	*****	-	-	-
09	-	-	-	-	-	18.0#	7.5	*****	*****	-	-	-
10	-	-	-	3.0	-	*****	31.5#	*****	*****	-	-	-
11	-	-	-	-	-	*****	*****	*****	*****	-	-	-
12	-	-	-	-	-	5.5#	*****	*****	*****	-	-	-
13	-	-	2.0	2.0	-	25.0	*****	*****	*****	-	-	11.5
14	-	2.0	-	-	-	-	*****	*****	*****	-	-	3.5
15	-	-	-	1.0	-	1.0	*****	*****	-#	-	5.0	2.0
16	-	-	-	-	1.0	0.5	*****	*****	-	-	-	0.5
17	1.5	-	-	-	9.5	-	*****	*****	-	-	-	-
18	-	0.5	-	-	-	5.0	*****	*****	-	-	-	-
19	-	1.0	-	-	-	0.5	*****	*****	-	-	-	-
20	5.0	-	-	-	-	2.5	*****	*****	-	-	-	-
21	2.0	-	-	-	19.0	-	*****	*****	-	-	48.5	-
22	-	-	0.5	-	17.0	8.0	*****	*****	-	-	8.5	-
23	-	-	7.0	-	5.5	-	*****	*****	-	-	-	-
24	-	-	12.0	10.0	2.5	-	*****	*****	0.5	-	-	-
25	-	-	1.5	-	-	-	*****	*****	-	-	-	-
26	-	-	1.5	6.0	-	-	*****	*****	-	-	-	-
27	-	9.0	1.0	16.5	26.0	0.5	*****	*****	-	-	-	-
28	3.0	12.0	-	42.0	31.0	6.5	*****	*****	-	-	0.5	-
29	0.5		-	-	5.0	5.5	*****	*****	-	-	-	-
30	-		-	-	4.5	1.5	*****	*****	0.5	-	-	-
31	-		-		13.0		*****	*****		-		-
Total	12.0	24.5	30.0	80.5	205.0#	184.5#	62.5#	******	1.0#	0.0	62.5	17.5

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2007

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	-	-	-	-	0.5	5.0	3.0#	-	-	19.0	-
02	-	-	-	11.5	-	4.5	5.5	-	4.5	2.0	1.0#	-
03	1.5	-	-	2.0	-#	-	2.0	-	-	13.5	-	-
04	-	-	0.5	0.5	4.5	-	7.0	-	16.0	-	-	-
05	-	-	3.5	-	3.0	-	28.0	2.0	-	-	-	-
06	-	-	1.0	-	-	2.5	1.0	17.0	-	-	-	-
07	-	-	0.5	0.5	-	6.0	-	-	-	-	-	-
08	-	-	-	-	-	15.0	-	14.5	-	-	0.5	-
09	-	-	-	-	-	7.0	1.5	24.0	-	-	-	-
10	-	-	-	2.5	-	43.5	-	19.0	-	-	-	-
11	-	-	1.0	-	-	-	-	7.0#	2.0	-	-	-
12	-	-	-	-	-	7.0	-	*****	-	-	-	-
13	-	-	0.5	-	-	20.5	-	-#	-	-	-	-
14	-	-	-	-	-	17.0	-	11.0	-	-	-	-#
15	-	-	-	-	-	7.5	-	0.5	-	-	-	*****
16	-	-	-	-	1.5	-	18.5#	23.0	-	-	-#	*****
17	8.0	-	-	6.0	-	5.5	-	1.5	-	-	-	*****
18	0.5	-	-	-	6.0	-	2.5	2.0	-	-	-	*****
19	-	-	4.0	-	21.5	-	2.5	-	-	-	-	*****
20	0.5	0.5	-	-	36.5	-	-	2.0	-	-	-	*****
21	-	0.5	-	-	10.5	-	-	5.5	-	-	-	*****
22	-	3.5	-	2.5	17.5	-	-	26.0	-	-	-	*****
23	-	-	-	1.0	9.0	-	-	3.5	4.5	-	-	*****
24	-	0.5	-	30.0	-	4.5	-	-	21.0	-	-	*****
25	-	3.5	-	1.5	-	0.5	-	-	2.5	-	-	*****
26	-	-	2.0	-	-	12.5	-	1.0	-	-	-	*****
27	-	-	0.5	-	33.5	7.5	-	5.0	-	-	-	*****
28	-	-	-	-	9.5	42.0	-	1.5	-	-	-	*****
29	-		-	-	-	22.5	1.0	-	-	-	-	*****
30	-		-	1.0	-	24.0	-	-	-	3.0	-	*****
31	-		-		2.0		-#	-		3.0		*****
Total	10.5	8.5	13.5	59.0	155.0#	250.0	74.5#	169.0#	50.5	21.5	20.5#	0.0#

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

香港天文台
HONG KONG OBSERVATORY

Daily Total Rainfall (mm) at Tai Mei Tuk Automatic Weather Station in 2008

Day	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
01	-	-	-	1.0	0.5	-	*****	-				
02	-	5.0	-	-	4.5	-	*****	-#				
03	-	-	-	2.0	3.0	19.0#	-#	*****#				
04	-	1.0	-	-	-	*****	-	-#				
05	-	0.5	-	-	5.0	-#	3.0	*****#				
06	-	0.5	-	-	-	60.0	48.0	*****				
07	-	0.5	-	-	-	32.5#	53.5	2.0#				
08	-	-	-	-	-	*****	17.5	19.5				
09	-	-	-	-	-	*****	14.5	-				
10	0.5	-	-	-	3.5	0.5#	93.5	-				
11	0.5	-	-	-	6.5	25.5	16.5	8.5				
12	-	-	-	1.5	-	18.0	6.5	-				
13	-	-	-	1.0	-	68.5	20.5	-				
14	-	-	-	-	-	23.0	-#	-				
15	-	0.5	-	-	-	24.5	*****	-				
16	-	-	-	-	-	17.5	-#	-				
17	-	-	-	-	-	25.5	-	-				
18	-	-	-	-	-	30.5#	-	-				
19	-	-	-	88.0	11.0	*****	-	-				
20	-	-	-	0.5	17.5	*****	-	-				
21	-	-	-	-	1.5	*****	1.5	-				
22	-	0.5	17.0	-	0.5	*****	0.5	16.0				
23	-	3.0	-	5.5	0.5	*****	-	7.0				
24	1.0	-	-	-	8.5	*****	-	1.0				
25	10.5	1.0	-	2.0	2.5	*****	-	-				
26	-	-	5.0	-	-	*****	-#	-				
27	-	-	-	-	0.5	*****	-#	-				
28	-	-	3.0	0.5	-#	*****	*****	-				
29	1.5	-	-	-	*****	*****	*****	-				
30	11.5		-	-	*****	*****	*****	-				
31	1.0		-		*****		*****	-				
Total	26.5	12.5	25.0	102.0	65.5#	345.0#	275.5#	54.0#				

- means no rainfall
***** unavailable
# missing (less than 24 hourly observations a day)
Rainfall measured in increment of 0.5 mm. Amount of < 0.5 mm cannot be detected

Appendix 2

LCQ10: Traffic arrangements for access to Junk Bay Chinese Permanent Cemetery

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Following is a question by the Hon James Tien and a written reply by the Secretary for Home Affairs, Dr Patrick Ho, in the Legislative Council today (May 3):

Question:

Every year, during the Ching Ming, Easter and Chung Yeung holidays as well as on several preceding and following weekends, the Transport Department closes to all vehicular traffic the access road leading to the Junk Bay Chinese Permanent Cemetery. As a result, grave-sweepers have to walk about 1.3 kilometres uphill to the cemetery. It has been reported that on the day of the Ching Ming Festival this year, thousands of old and young people went to the cemetery to pay respects to their ancestors, but more than ten of them fell on the way or felt sick in the heat of the day. In this connection, will the Government inform this Council:

(a) of the average number of visitors to the cemetery for grave-sweeping on each of the road closure days this year; and

(b) how it will improve the traffic arrangements for access to the Cemetery, and whether it will consider the suggestions of the local community, such as providing an uphill escalator, a pedestrian link to Tiu Keng Leng MTR Station, or another vehicle access road; if it will consider, of the details; if not, the reasons for that?

Reply:

Madam President,

(a) To ensure public safety and facilitate vehicular and pedestrian traffic at the Junk Bay Chinese Permanent Cemetery (the cemetery) and the nearby area, special traffic arrangements are implemented every year during Ching Ming and Chung Yeung Festivals (the festivals). These include closure of the access road to the Cemetery to all vehicular traffic on the days of the Festivals and on Saturdays, Sundays and public holidays in the weeks preceding and after the festivals. The dates of road closure during the Ching Ming Festival in 2006 and the number of visitors to the cemetery on each of those dates are set out in the Annex.

(b) The road closure arrangements are part of the package of measures implemented since the Chung Yeung Festival in 2001 to improve access to the cemetery during the festivals in the light of the serious traffic congestion at the cemetery and the nearby area during the Ching Ming Festival in 2001 (note). Other measures to facilitate grave sweepers' access to the cemetery include -

(i) Widening of the existing access road: the Board of Management of the Chinese Permanent Cemeteries (BMCPC) widened the access road from the entrance at Yau Tong to the Cemetery Office to dual lanes in March 2002 at a construction cost of $26.8 million;

(ii) Special bus service: except on Ching Ming Festival and Chung Yeung Festival and the Sundays preceding and after the festivals, the Kowloon Motor Bus Company (1933) Limited operates a special bus service (Route No 14S) from Yau Tong via Lei Yue Mun Road to the cemetery on the road closure days; and

(iii) Spreading out the flow of visitors to the cemetery: the BMCPC advances the opening hours of the cemetery to 7am on road closure days and encourage the public to sweep graves on weekdays through the media.

As a long-term measure to further improve access to the cemetery during the festivals, the BMCPC is looking into the feasibility of constructing a footpath linking the cemetery to the Tiu Keng Leng area and will consult the Kwun Tong and Sai Kung District Councils again on the latest proposal shortly.

As regards the suggestions of constructing an escalator connecting the cemetery with Yau Tong area and the provision of a vehicular access connecting the cemetery with the proposed road network in Tiu Keng Leng area, the BMCPC and the departments concerned have concluded that both suggestions are not viable -

* Escalator: this will not help resolve the existing bottleneck problem at Yau Tong area as both the proposed escalator and the existing access road start at Ko Chiu Road, Yau Tong. In addition, since high usage of the escalator will mainly be confined to the few weeks preceding and after the two festivals, it is not cost effective having regard to the high construction and maintenance costs of the escalator.

* Vehicular access: given the huge vertical level difference between the cemetery and the proposed road network in Tiu Keng Leng area, an access road connecting the two involves sophisticated technical issues including substantial environmental

impacts and any additional reclamation which are not justified having regard to the usage of the road being confined to the Ching Ming and Chung Yeung Festivals. Moreover, the works programme for the road network in the area is also not definite and a long lead time is required for its completion. Given the above, this proposal will not meet the imminent need to improve access to the cemetery to relieve the overcrowdedness during the festival periods.

(Note: Previously, road closure was implemented on the few days preceding and after the Festival Days. Since the Chung Yeung Festival in 2001, such measures have been extended to all Saturdays, Sundays and public holidays in the weeks preceding and after the Festival Days.)

Ends/Wednesday, May 3, 2006

Number of Visitors to the
Junk Bay Chinese Permanent Cemetery on Road Closure Days during the Ching Ming Festival in 2006

Road Closure Date	Number of Visitors
12.3.2006 (Sun)	21 008
18.3.2006 (Sat)	10 090
19.3.2006 (Sun)	22 160
25.3.2006 (Sat)	11 962
26.3.2006 (Sun)	17 424
1.4.2006 (Sat)	15 970
2.4.2006 (Sun)	23 372
5.4.2006 (Wed) (Festival Day)	67 076
8.4.2006 (Sat)	12 362
9.4.2006 (Sun)	16 740
14.4.2006 (Fri) (PH)*	14 086
15.4.2006 (Sat) (PH)	10 374
16.4.2006 (Sun) (PH)	20 439
17.4.2006 (Mon) (PH)	11 643
22.4.2006 (Sat)	9 885
23.4.2006 (Sun)	11 173
29.4.2006 (Sat)	4 611
30.4.2006 (Sun)	16 952
1.5.2006 (Mon) (PH)	6 747
5.5.2006 (Fri) (PH)	not available

(PH)*: Public Holiday