# Expansion of Hong Kong International Airport into a Three-Runway System



Egretry Survey Plan

# Appendix B. CVs of the Nominated Surveyors

#### **Environmental Team Services for**

## **Expansion of Hong Kong International Airport** into a Three-Runway System

Curriculum Vitae Gary CHOW

Position: Ecologist

Name: Gary CHOW

**Education/** MSc (Sustainable Tourism) The Chinese University of Hong Kong, 2009 **Qualifications:** BSc (Hons) (Environmental Science) The University of Hong Kong, 1999

#### **Key Experience:**

Mr Chow has over 14 years of experience in ecological research, especially in ornithological study. Resourceful in local ecology and experienced on planning and undertaking ecological field survey. Possess technical skills in undertaking environmental impact assessment (EIA), Independent Environmental Checker (IEC) service and due diligence. Relevant experience on ecological impact assessments includes South Island Line (East) EIA; Tai Shue Wan Development at Ocean Park EIA Study; and Liantang/Heung Yuen Wai Boundary Control Point and Associated Works EIA.

Over twelve years of contribution to the Waterbird Monitoring Programme in Mai Po and Inner Deep Bay Ramsar Site. Six years service in Biodiversity, and Wetland and Fauna Conservation Divisions in Agriculture, Fisheries and Conservation Department (AFCD), conducting comprehensive baseline survey on local bird fauna and co-ordinating nature conservation and wildlife research projects. Specialises in ornithological research but also possess broad knowledge on biodiversity of Hong Kong.

Selected experience on egretry monitoring including egret colony study for the South Island Line (East) EIA study in 2009, egretry investigation for Tai Shue Wan Development at Ocean Park EIA in 2013, egretry survey for Expansion of Hong Kong International Airport into a Three-Runway System EIA Study in 2013, egretry survey for the Proposed Expansion of Sha Tau Kok Sewage Treatment Works in 2014.

#### **Selected Project Experience:**

**Ecological Survey and Assessment for Yuen** Long Bypass Floodway - Project Manager. It is an ecological research project for providing ecological evaluation and advice for a drainage channel Yuen Long Bypass Floodway which involves a two years on-site ecological monitoring. Gary is project manager of the project responsible for leading the research and field survey works and provides adaptive advice to the drainage management party. He is responsible for liaison with government department, local NGOs and stakeholder to formulate most feasible ecological а enhancement plan for the drainage channel.

**Tai Shue Wan Development at Ocean Park EIA Study** – Project Manager for the EIA study responsible for coordinating EIA investigation work, liaison with EPD and other key government department, providing advice to the project team for adjustment of project design in

responding to EIA requirement. The EIA report was successfully submitted and approved by EPD.

**Expansion of Hong Kong International** Airport into Three-Runway System Environmental **Impact** Assessment Environmental Specialist responsible for coordinating baseline terrestrial ecological surveys and impact assessment related to avifauna directly and indirectly affected by the project.

Ecological Survey for the Proposed Expansion of Sha Tau Kok Sewage Treatment Works — Project Management responsible for arranging ecological field survey for the proposed works area. The scope of the field cover terrestrial fauna and flora, intertidal and sub-tidal coastal habitat, and specialized

### **Expansion of Hong Kong International Airport** into a Three-Runway System

Curriculum Vitae Gary CHOW

survey on particular fauna such as egretry, horseshoe crab and seagrass.

Liantang/Heung Yuen Wai Boundary Control Point and Associated Works EIA — Conducting ecological field surveys, providing fauna species evaluation and proposing mitigation measures for the Project. The Study covered wide range of rural area in the Northeast New Territories where a suite of fauna species of conservation concern was recorded but the ecological impact was sufficiently mitigated with the proposed measures, including a wetland and woodland compensation plan.

Agreement No. LD01/2012 Eco-hydraulics Study on Green Channels – Stage 1 – The project involves the preparation of inventory of existing engineered and green channels/rivers of DSD, to conduct desktop study to assess and ranking the eco-hydraulics performance of the existing green channels in Hong Kong and to provide guidelines on green channels design with a balance of proper enhancement on the ecological value of the channels with due consideration of the hydraulic resistance.

South Island Line (East) EIA - Conducted ecological baseline survey and ecological impact assessment of the proposed railway and associated structures construction during the constructional and operational phases. Carried out supplementary egret survey to study the ecology of the potentially affected Recommended earet colony. mitigation measures to avoid. minimize and compensation for loss of ardeid night roost.

Construction of Cycle Tracks and the Associated Supporting Facilities at Nam Sang Wai, Yuen Long – Environmental Consultant for conducting impact assessment for the habitat having high ecological value, including the Mai Po and Inner Deep Bay Ramsar Site. The cycle track was situated in protected zone where impact prediction and proper mitigation needed special attention. Several site-specific mitigation measures were recommended to reduce. avoid and

compensate the potential impact to the ecological sensitive area.

Planning and Engineering Study for Kwu Tung South Feasibility Study – The objective of the study is to examine and identify sites within the Potential Development Area in Kwu Tung South for low-rise and low-density private housing development. Environmental Team Co-ordinator responsible for co-ordinating environmental works for the study, which included compiling all the environment study results into a Preliminary Environmental Review (PER).

Construction of a Secondary Boundary Fence and New Sections of the Primary **Boundary Fence and Boundary Patrol Road EIA –** The project comprises the construction of a Secondary Boundary Fence along the southern edge of the existing Boundary Patrol Road (approximately 21.7km) from west (Pak Chau) to (Sha Tau Hok east Kok). Environmental consultant conducting baseline ecological surveys in the Frontier Closed Area to assess the potential impacts that may arise from construction and demolition of the boundary fences along ecological sensitive locations.

Umbulan Bulk Water Supply Project, East Java, Indonesia (2012) – Ecologist conducting due diligent identifying key ecological impact associated with the water supply project in particular to the wetland ecosystem and aquatic fauna through both review of literature and on-site ecological survey. Scope of further ecological assessment was recommended for fulfilling the IFC standard.

#### **Employment History:**

2008- Present	Senior Environmental Consultant  – Mott Macdonald Hong Kong Ltd
2002-2008	Supervisor – Agricultural Fishery and Conservation Department
2000-2002	Ecologist and Education Officer – Tai Po Kau Interactive Nature Center
1999-2000	Research Assistant – World Wide Fund for Nature

#### **Environmental Team Services for**

### **Expansion of Hong Kong International Airport** into a Three-Runway System

Curriculum Vitae Heidi YU

Position: Ecologist

Name: Heidi YU

Education/ MSc Environmental Science, The Hong Kong University of Science and

**Qualifications:** Technology, 2007

BSc (Hons) Applied Chemistry (Environmental Concentration), Hong Kong

Baptist University, 2006

#### **Key Experience:**

Ms Yu has six years of experience in environmental study and is specialized in ecological research. She has carried out ecological impact assessment and field surveys for high profiled EIA projects including avifauna and intertidal field survey for the Expansion of Hong Kong International Airport into a Three-Runway System and terrestrial ecological field for MTR South Island Line (East). She is experienced in liaison with government department for co-ordination of EIA and PER works, which include infrastructures project such as Organic Waste Treatment Facilities Phase 2 and land use planning such as Kwu Tung South Feasibility Study. Other than EIA, she is also knowledgeable in ecological study and provides technical advice for ecological habitat management, which is shown in her co-ordination works for Yuen Long Bypass Floodway project.

Selected experience on egretry monitoring including egretry and night roost investigation for Tai Shue Wan Development at Ocean Park EIA in 2013, egretry survey for Expansion of Hong Kong International Airport into a Three-Runway System EIA Study in 2013 and egret night roost study for the South Island Line (East) EIA in 2008-2009.

#### **Selected Project Experience:**

Tai Shue Wan Development at Ocean Park – (2013-2014) – Ocean Park Corporation – an EIA study for development of a new waterpark at Tai Shue Wan where it was a roosting and breeding site for egrets. Conducted egretry survey, baseline monitoring of ardeid roosting site, investigation of alternative roosting sites in the territory and ecological impact assessment.

Ecological Survey and Assessment for Yuen Long Bypass Floodway – (2013-present) – Drainage Services Department – project coordinator for monthly bird monitoring and other ecological surveys for Stage 2 Study, managing ecological assessment and proposing ecological improvement measures for Stage 1 Study.

Planning and Engineering Study for Kwu Tung South – (2013-present) – Civil Engineering and Development Department and Planning Department – Responsible for ecological and environmental baseline review, providing assistance in project coordination and conducting monthly ecological surveys including avifauna (transect and flight-line surveys), herpetofauna, dragonfly, butterfly and mammal surveys.

Expansion of Hong Kong International Airport into a Three-Runway System – (2012-2013) – Airport Authority Hong Kong – Conducted survey of ardeid nests at Sha Chau Egretry and avifauna survey at Chek Lap Kok and Sha Chau island; also carried out terrestrial field surveys and coordinated intertidal surveys at Chek Lap Kok and Lantau Island.

Development of Organic Waste Treatment Facilities Phase 2 Feasibility Study – (2012-2013) – Environmental Protection Department – EIA for the development of OWTF at Sha Ling; Conducted ecological field surveys including inspection of Man Kam To Road Egretry, and ecological impact assessment; Acted as EIA Coordinator to liaise with sub-consultants and government officers, coordinate inputs for EIA submissions and respond public comments.

Review, Design and Tender Documentation for Drainage Improvement Works at Tsung Yuen, Kwu Tung North – (2011-2012) – Drainage Services Department – Conducted ecological field survey including investigation of Ho Sheung Heung Egretry and impact

#### **Environmental Team Services for**

### **Expansion of Hong Kong International Airport** into a Three-Runway System

Curriculum Vitae Heidi YU

assessment for the Environmental Review of the project.

Liantang/Heung Yuen Wai Boundary Control Point and Associated Works – (2010-2011) – Civil Engineering and Development Department – The project is to establish a new Boundary Crossing Point in the eastern part of the Hong Kong-Shenzhen boundary, also a connecting road from the boundary to Fanling Highway. Assisted in ecological impact assessment and conducted ecological baseline surveys (including investigation of Ping Che Egretry), tree surveys and literature review on ecological resources in the study area.

South Island Line (East) EIA (2008-2009) – Mass Transit Railway (MTR) Corporation – The new line comprises approximately 7km of railway alignment and from Ap Lei Chau island to the existing Admiralty station, including a railway bridge across Aberdeen Channel. Conducted terrestrial and intertidal ecological baseline surveys for the construction and operation of the proposed railway and associated structures, noticeably ardeid night roost survey at Wong Chuk Hang Nullah and follow-up investigation at other parts of Hong Kong.

Cycle Tracks Connecting Northwest New Territories with Northeast New Territories (Extension), Major Sections – (2008-2009) – Civil Engineering and Development Department – This project aims to link existing tracks to over 100km long continuous cycle track network that enhances recreational facilities, provides socioeconomic benefit and capitalizes on Hong Kong's landscape asset. Conducted ecological field surveys for the designated project at Nam Sang Wai Section which included survey of ardeid nests at Tung Shing Lane Egretry and monthly baseline survey of waterbirds at Kam Tin River and Shan Pui River.

Construction of a Secondary Boundary Fence and New Sections of the Primary Boundary Fence and Boundary Patrol Road EIA – (2008-2009) – Architectural Services Department – The project alignment is about 21.7km in length generally running from west of Mai Po to east of Sha Tau Kok. Part of its route situates within the Wetland Conservation Area (WCA) at Mai Po, the

home for a diversity of waterbird species. Conducted literature review on ecology and baseline ecological surveys in the Frontier Closed Area; Conducted water quality assessment including literature review and impact assessment on water quality of rivers, streams and marine water in the assessment area.

West Kowloon Cultural District Development – (2011-2013) – West Kowloon Cultural District Authority – Conducted ecological surveys and assisted for EIA Study on ecology as well as fishery, waste management implications and land contamination.

Deep Cement Mixing (DCM) Trial Works -(2011-2012) - Airport Authority Hong Kong - The project aimed to investigate the effectiveness of the proposed DCM as a ground treatment method for land formation over the existing capped contaminated mud pits and to assess the potential environmental impacts of the DCM trial. Responsible for reviewing deep cement mixing (DCM) practices in Japan and other countries and the associated environmental impact assessment; assisting in the provision of a comprehensive environmental monitoring and programme for DCM trial works; coordination and analysis of testing results for water and sediment samples to ascertain the potential environmental impacts during the first DCM installation works in Hong Kong.

#### **Voluntary Work**

Waterbird Monitoring at the Mai Po Inner Deep Bay Ramsar Site – (2011) – Hong Kong Bird Watching Society – conducted monthly waterbird monitoring in Mai Po and Inner Deep Bay Ramsar Site, a project commissioned by AFCD to facilitate the management of the Ramsar Site.

#### **Employment History:**

2013 -	Environmental Consultant – Mott
Present	MacDonald HK Ltd
2008 -	Assistant Environmental
2013	Consultant – Mott MacDonald HK Ltd.
2007	Project Assistant – The Hong
2007	Kong University of Science and
	Technology